



LOCAL CAR ASSEMBLING INDUSTRY IN ETHIOPIA
OPPORTUNITIES AND CHALLENGES

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UNIVERSITY

JUNE 2018



**LOCAL CAR ASSEMBLING INDUSTRY IN ETHIOPIA:
OPPORTUNITIES AND CHALLENGES**

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Thesis submitted to
The Department of Business and Management for Partial Fulfillment of the
Requirements for the Degree of Master of Business Administration in Industrial
Management

ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY

JUNE 2018

Declaration

I hereby declared that this thesis entitled “**Local car Assembling Industry in Ethiopia: Opportunities and Challenges**” was composed by myself with the guidance of my advisor Fetene Bogale(Ph.D), that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted, in whole or part of any other degree or professional qualification.

Dereje Mengesha Beshah

SignatureDate.....

Certificate

This is to certify that the thesis prepared by **Mr. Dereje Mengesha Beshah** entitled “ **Local car Assembling Industry in Ethiopia: Opportunities and Challenges**” and submitted in fulfillment of requirements for the Degree of Master of Science with the regulation of the University and meets the accepted standards with respect to originality and quality.

Signed by Examining Board:

Examiner..... Signature.....Date.....

Examiner..... Signature.....Date.....

Thesis Advisor:.....Signature Date.....

ABSTRACT

The study under the title of “*local car assembling industry in Ethiopia opportunities and challenges*” is analyzed with descriptive research survey design. The researcher looking for the problems and gave suggestion for significant challenges accordingly. For purpose of this study both primary and secondary data are used and also the survey source of primary data was collected from five Ethiopian local car assembling industry and metal engineering development institute management members through questionnaire, interview and physically observed factories and offices which are located in Addis Ababa.

Though, the manufacturing sector has been selected as a high priority sector by Ethiopian government **with some better opportunities**, the most negative bureaucratic acts, not clearly stated law, policies and procedures interpretation and implementation were mainly viewed as the industry challenges. This lead to raise questions how this booming demand will be met from imported or by limited local car assembly production capacity. The main observed reasons for under capacity utilization, shortage of raw materials, negative attitude for the Chinese products, taxation and, interruption of power and irregular water supply, poor shipping line services are seem to be the main and more ordinary reasons for under capacity utilization of the industry.

More over the following key points were considered as the most challenging area for the local car assembly industry on the subject of the policies and procedures are primarily examined and concluded from the research findings

Key words

- Car assembling
- Opportunities
- Challenges

ACKNOWLEDGMENT

I would like to express my deepest appreciation to all those who provided me the possibility to complete this research paper. I have also a special gratitude to my instructor Ftene Bogale (Ph.D), whose contribution in stimulating suggestions and encouragement helped me to coordinate our research paper.

Furthermore I would also like to acknowledge much appreciation to the crucial role of the car assembly industries and metal and engineering development institution management members those who are gave me their special attention to respond the questions to get all required information.

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LIST OF ABBREVIATION

SSA: Sub-Saharan Africa

GTP II: second Growth and Transformation Plan

AGOA: African Growth and Opportunity Act

IMF: International Monetary Fund

GVP: gross value of production

VAMP: value added at basic price

ADLI: Agricultural Development Led Industrialization

GTP: Growth and Transformation Plan

CSA: Central Statistical Agency

METEC: Metal and Engineering Corporation

MIE: Mesfin Industrial Engineering

CKD: Completely Knocked Down

SKD: Semi knockdown

(NAIDP): New Automotive Industry Development Plan

(OICA): Organization Internationale des Constructeurs d'Automobiles

(BAI): Bishoftu Automotive Industry

(APCs): Armored personnel carriers

(EIC): Ethiopian Investment Commission

(FBU): Fully Built-Up

(AGOA): African Growth and Opportunity Act

(KNBS): Kenya National Bureau of Statistics

(FBU): Fully Built-Up

VII

(AGOA): African Growth and Opportunity Act

(KNBS): Kenya National Bureau of Statistics

(SAP): Structural adjustment programme

(GMEA) :General Motors East Africa

(AVA): Associated Vehicle Assemblers

(EAC:) : East Africa Community

(HCVs): Heavy commercial vehicles

(LCVs): Light commercial vehicles

(NAC): Automotive Council

(NAIDP): Automotive Industry Development Plan

APPENDIX I
Questionnaire



ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY
DEPARTMENT OF BUSINESS ADMINISTRATION
MBA PROGRAM

Dear respondents,

The main objective of this study is to examine the local car assembling industry opportunities, challenges and trend in Ethiopia. This questionnaire is equipped to gather appropriate data to the study which is believed to come up with valuable recommendation for problem observed. Therefore, your important support in responding to the question raised is of vital importance to the success of the study. Hence I sincerely request you to fill the questionnaire carefully. The quality and quantity of information you provide determines the ultimate reliability of the study. Thank you in advance for your continual cooperation. This questionnaire has no any intension except for academic purposes. And its confidentiality is maintained intact.

Sincerely

Dereje Mengesha

Tel: - 09-11-24-60-50

Email:- dereje2297@gmail.com

I. Respondents' Demographic Data

Please tick (✓) where appropriate.

1. Gender

Male ☐ Female ☐

2. Age

a) 21-30 ☐ b) 31-40 ☐ c) 41-50 ☐ d) 51 and above ☐

3. Educational level

a) Diploma ☐ b) Degree ☐ c) Masters ☐ d) PhD ☐

4. Occupational Level

a) General Manager ☐ b) Deputy G/manager ☐ c) Director
d) Department Head ☐ e) Division head ☐ f) supervisor ☐

5. For how long you stay on this status?

a) Below 1 year ☐ b) from 1 – 3 years ☐ c) from 4 – 6 years ☐
d) 6 years and above ☐

A. REGARDING THE FINANCE LAWS, POLICIES AND PROCEDURES

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
1. There are preconditions that constrained (hinder) obtaining bank loan for automotive industry.					

If **strongly agree or agree**, what are the conditions? If you disagree or strongly disagree, why

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree

2. There are problems to obtain foreign currency from the bank.					
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If **strongly agree or agree**, what are the problems? If you disagree or strongly disagree, why

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
3. Suppliers' credit is acceptable in the country to the local car assemblers					

If **strongly agree or agree**,? If, you disagree or strongly disagree, why?

.....
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.....

B. QUESTIONS REGARDING THE CUSTOMS DUTY AND CUSTOMS LAWS, POLICIES AND PROCEDURES OF GOVERNMENT

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
4. There is difference in taxation between those who import finished product for direct sale and inputs imported by new car assemblers.					

If **strongly agree or agree**, what makes difference them? If you disagree or strongly disagree, why ?

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
5. Collection of withholding tax and sure tax by customs authority at the time of import					

of raw materials and spare parts affect the car assembling industry.					
----------------------------------------------------------------------------	--	--	--	--	--

If **strongly agree or agree**, which factors are affects the industry? If you disagree or strongly disagree, why ?

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C. REGARDING THE GOVERNMENT SUPPLY AND LOGISTICS LAWS, POLICIES AND PROCEDURE

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
6. The period given for demurrage in port is enough from Ethiopian shipping line.					

If **strongly agree or agree**, for what reasons? If you disagree or strongly disagree, why?

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
7. There is enough time to return rented containers for input material.					

If **strongly agree or agree** how many days are given to return? If you disagree or strongly disagree, why ?

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
8. There is special service desk is arranged in the Ethiopian Shipping Line Offices for car assembly sector as a					

manufacturing industry.					
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If **strongly agree or agree**, how do they perform? If you disagree or strongly disagree, why

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
9. Car assembly factories have been subjected to levying higher amount of penalty while importing inputs.					

If **strongly agree or agree**, at what situations? If you disagree or strongly disagree, why

.....

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
10. There is room for negotiation with the shipping line to determining the freight cost					

If **strongly agree or agree**, how do confirm it? If you disagree or strongly disagree, why ?

.....

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
11. There are some occurrences for raw materials loading and unloading in ports without consensus from the importer.					

If **strongly agree or agree**, for what reason? If you disagree or strongly disagree, why

.....

D. REGARDING THE GOVERNMENT PROCUREMENT PROCEDURE

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
12. Government vehicle procurement system is encouraging for local car assemblers.					

If **strongly agree or agree**, which system is encouraged? If you disagree or strongly disagree, why

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E. SUPPLY OF INFRASTRUCTURE

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
13. Electric power supply and related services are well for the sector.					

If **strongly agree or agree**, how do you explain it? If you disagree or strongly disagree, why?

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F. THE PROBLEMS RELATED WITH THE SUPPLY OF LAND

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
14. The process of acquiring land for investment easy and manageable within short period of time and required space.					

If **strongly agree or agree**, how do you explain the responses in terms of time and space required? If, you disagree or strongly disagree, why?

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
15. Country of origin of domestic car assembler's raw material does not have any challenges to sell the assembled vehicles in local market.					

If **strongly agree or agree**, what are the sales challenges? If you disagree or strongly disagree, why ?

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G. QUESTIONS RELATED WITH THE MARKET AND PRODUCTION

Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
16. Each car assembly factory production capacity utilized at their full capacity.					

If **strongly agree or agree**, what factors favoring you? If you disagree or strongly disagree, why?

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
17. We can say that all locally assembled, new and used imported cars meet the country automobile demand.					

If **strongly agree or agree**, how can? If you disagree or strongly disagree, why?

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Questions related access to finance	5-Strongly agree	4-Agree	3-Neutral	2-Disagree	1-Strongly disagree
18. Ethiopian automotive industry have created opportunities for the country					

If **strongly agree or agree**, what are the opportunities? If, you disagree or strongly disagree, why?

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19. What do you suggest to improve the industry as a whole?

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APPENDIX II

INTERVIEW QUESTIONS

- Which tax type and rate discourage the local car assemblers?
- What type of taxation practices applied to missed, broken or wear/tear factory items that are imported as raw material and input for the assembly?
- Which infrastructures provision other than electric power supply influence the performance your industry?
- What are the main challenges for local car assemblers to sell their vehicles in the local market?

CHAPTER ONE

1. BACK GROUND OF THE STUDY

1.1 Introductions

The automotive industry is one of the world's largest industrial sectors and over the past three decades, the centre of gravity of global production has been shifting towards developing countries, most notably China but also to other parts of Asia and to Latin America. Sub-Saharan Africa (SSA) has hardly been touched by this shift in production and, outside of South Africa, the industry is virtually non-existent. (Black, A., Makundi, B. and McLennan T. (2017), SSA therefore remains the last frontier for automotive production. This is not surprising given prevailing low incomes and low growth for the last two decades of the twentieth century. But since 2000, SSA has been one of the world's fastest growing regions and rapid expansion looks set to continue. (Black, A., Makundi, B. and McLennan T. (2017),

Demand for motor vehicles is highly income elastic and in developing countries undergoing rapid growth, the experience all over the world has been of extremely rapid increases in demand for new vehicles. The reason is simply that when per capita incomes are raising in lower income countries, the middle class expands much more rapidly than the economy as a whole. This is the case in SSA, which is experiencing rapid growth in vehicle demand albeit from a very low base. Virtually all of this demand is being met by imports because outside of South Africa, production is almost non-existent. Vehicle imports therefore provide a good proxy of market size and imports of passenger vehicles into SSA (excluding South Africa) amounted to 1.4 million vehicles in 2013 and have grown at 19% per annum since 2000. (Black, A., Makundi, B. and McLennan T. (2017), While such a rapid pace will not be sustained, our projections show that

the passenger vehicle market will exceed 10 million units by 2030, which will make it comparable to the expected market in South America at that time. (Black, A., Makundi, B. and McLennan T. (2017),

This leads to the question of how this booming demand will be met – from imports or from production within Africa. The automotive industry encompasses a full range of industrialization processes including metal fabrication, plastics and electronics and has considerable technological spill over. Without domestic production, vehicle imports can rapidly become a major foreign exchange burden. Many developing countries have sought to develop the sector which has frequently been seen as emblematic of national industrialization. Outside of typically state owned industries such as telecommunications, no other sector has received as much state attention and support. In countries such as Korea, Thailand, Brazil and Mexico, the automotive industry has played an important role in national development. In a number of other countries, costly government support has not produced sustainable growth for the industry. This latter group includes a number of countries in SSA which in previous decades, embarked on small scale vehicle assembly but with no lasting impact. (An overview of Ethiopian manufacturing sector (2014).

The level of industrialization in most parts of SSA is very low and manufacturing capabilities are limited. Moreover, in the automotive industry, scale is all important and in spite of progress towards regional integration, Africa remains divided into dozens of mainly small markets. A crude comparison with India illustrates the point. In India and SSA, total output, population, per capita incomes and vehicle markets are of similar magnitude. Because it has a unified market (protected by a common external tariff) (School of Economics University of Cape Town, TIPS (Annual Forum Johannesburg July 2015)

With one of Africa's fastest growing economies for more than a decade, Ethiopia has pulled off the Grand Ethiopian dam and others that helped make it an electricity exporter. Ethiopia's expanding transport network includes the successful Ethiopian Airlines, the largest and fastest growing African airline, according to Ghana Web. Ethiopian Airlines won the African Airline of the Year Award 2016 at the 25th Anniversary African Aviation Air Finance Africa Conference & Exhibit in Johannesburg. This year, a railway will link the landlocked country, population 97 million, to Djibouti port where the Red Sea meets the Indian Ocean, providing a cheap and fast way to import raw materials and export finished goods. "The aim is to become a leading manufacturing hub in Africa," said State Minister for Industry Tadesse Haile in a Reuters interview Written by Dana Sanchez Jun 01, 2016. "We want to become the top producer of cars on the continent in 15 or 20 years." In industrial zones around Addis Ababa and the northern city of Mekelle, Ethiopian firms and Chinese partners assemble vehicle kits. They imported 38,000 assembled cars in 2015, a 50 percent-plus increase over 2014.

Ethiopia produces about 8,000 commercial and other vehicles a year for the local market, including about 2,000 cars but they could make more if they could get more foreign exchange to import more kits, Reuters reported. "There is a lot of potential for growth," said Ma Qun, deputy manager of China's Lifan auto group in Ethiopia, which has the capacity to assemble 5,000 cars a year but whose output is less than 1000. "We want to start exporting from Ethiopia by 2018, or a year later," he said. For now, Ethiopia has to compete with South Africa, which makes 600,000-plus fully manufactured vehicles, and Morocco, which makes 200,000. Egypt, Kenya and Sudan also assemble vehicles. South Africa has a large domestic market with annual per capita income of \$6,800 compared to Ethiopia's \$550, according to World Bank 2014 data. Morocco — annual per capita income, \$3,070 — is geographically close to the huge European

market. Assemblers in Ethiopia put together Chinese brands Geely, FAW, BYD and Lifan. With Ethiopia's limited currency reserves, assemblers face challenges getting enough dollars to import kits. Another problem is consumers unsure about quality. Chinese car firms are central to Ethiopia's vehicle manufacturing plans. Chinese car kits are cheaper than rivals such as Japan, said an executive at an Ethiopian manufacturer. **Thus all the above mentioned common problems for each assembler are good indicators for further research to obtain solution the industry.** South Korea wants a piece of the action. South Korean automobile manufacturer Kia Motors Corp. has broken ground on a community-run auto mechanic training center in Ethiopia due to be completed in 2017, Economics Times reported. The centers will enable trainee mechanics to work towards national qualifications. Ethiopia's car assemblers face another challenge. Their cars don't hold their prices as well as finished imports. "The big obstacle they face is resale value," said Araya Lakew, whose mekina.net website links buyers and sellers. Some used imports, such as Toyotas, even gain value with the weaker currency; unlike locally assembled models. Lifan's marketing director Tomi Su said his firm would keep making models that are more attractive to consumers. "There will be new gadgets in every upgrade," he said. (<http://www.cavie.org/en/index.php/en/assurance-2/113>.)

Table -1 List of Automobile assembler

No	Industry Description	Region	Type of product	Capacity/ Year	Specific Location
1	Belayab Enterprise plc	Oromia	Automobiles assembly	6500	Adama
2	BH trading plc/Abay Technic	Addis Ababa	Automobiles assembly	1056	Mexico
3	Bishofitu Automotive Industry	Oromia	Automobiles Assembly, Trailers	3168	Bishofitu
4	Lifan motors plc	Addis Ababa	Automobiles Assembly	5000	Kality
5	Mesfin Industrial Engineering Plc	Tigray	Automobiles and Trailers Assembly	3000	Mekelle
6	Redawa Motors	Dire dawa	Automobiles assembly	2904	Dire Dawa
7	Jin bei Motors	Oromia	Automobiles assembly	2112	Gelan

Source: Metal Industry Development Institute

Therefore this paper set out to explore both the opportunities and challenges for car assembling industry in Ethiopia. Section two provides an analysis of the industry trend with opportunity and challenges of car assemblers in Ethiopia. It also points to the limitations of the data on this young but fast growing market and industry. In section three the researcher we outline current developments in the industry. Section four concludes the research finding with recommendation.

The Ethiopian government has been targeting both public and private investment into value-added manufacturing, in an effort to diversify the economy away from agriculture. Ethiopia is making a substantial effort to link into global value chains by targeting export-orientated manufacturing and

has attracted a number of investors into the garment and textile industry. This is seen to support the government's goal of becoming a middle income country by 2025.

The manufacturing sector has been selected as a high priority sector by government. As a result, Ethiopia's economic policy, the second Growth and Transformation Plan (GTP II), aims to support and grow the manufacturing contribution to GDP from 4% in 2014 to 8% by 2020. This is supported by attracting investment through industrial parks and extending incentives, including tax incentives, to foreign investors. For example, new investors in the manufacturing sector, including automotives, are exempt from paying income tax for a period of five years if more than 50% of their products or services are exported, or if more than 75% of their product is supplied to an exporter as a production input. Investors who only supply the local market or export less than 50% of their product are tax exempt for two years. Income tax exemptions ranging from one to ten years are applicable to investors in a range of prioritized industries and sectors which include manufacturing but not specifically automotive or component manufacturing. In fact, a dedicated automotive manufacturing policy is not in place. Given that the current tax regime governing vehicle excise and surtax does not distinguish between imported or locally assembled vehicles, levying of these taxes does not provide any incentive for establishing local assembly or manufacturing but rather serves as a revenue generation mechanism for the government. While most vehicle imports attract high tax rates, the Ethiopian Government does not levy any export duty on vehicles. Duty-free exports and preferential market access due to its membership of the Common Market for Eastern and Southern Africa and duty-free access to the US under the African Growth and Opportunity Act (AGOA), provide Ethiopia with access to a much larger market than its domestic market. The experiences of automotive hubs in emerging markets

including Mexico, South Africa and Thailand, indicate that preferential or duty-free access to large export markets is beneficial for the development of an export-oriented automotive industry.

1.2 Statement of the problem

With one of the highest poverty levels in the world, Ethiopia is considered by many to be one of the most under-developed nations in the world. But within its African boundaries lies a nation filled with a rich culture and heritage. Bordered by Kenya, South Sudan, Sudan, Djibouti, Eritrea, and Somalia, Ethiopia has an estimated 2018 population of 107.53 million, which ranks 14th in the world.(Ethiopian Population (2018-01-24).Retrieved 2018-04-21).

In 2018 population of approximately 107.53 million, up from 2015's estimate of 98.9 million, Ethiopia are the most populous landlocked country in the continent of Africa and the second-most populous country of Africa after Nigeria. This estimate of how many people live in Ethiopia is based on the most recent United Nations projections, and makes Ethiopia the 14th most populous country in the world. The most recent census in 2007 found an official population of 73.7 million. Ethiopia has a population density of 83 people per square mile (214/square mile), which ranks 123rd in the world **Population Data via United Nations WPP (2015 Revision, Medium Variant)** The Federal Transport Authority disclosed the number of cars in Ethiopia has **More Than 831,000 Vehicles on Its Streets.**

Public Relations and Communications Director with the Authority, YigzawDagneu, commented the number of cars imported had increased as the nations and its citizen's economy grew based on the country number of cars in Ethiopia last year was 708,410, however, it has now reached 831,265.From the entire number of cars, 62 percent of them are found in the nation's capital, Addis Ababa.In the aim of banning old and technically unfit cars, the authority supervised vehicles intensively, In addition to this, the Authority also submitted a study to the Ministry of

Finance and Economic Cooperation to ban import of old vehicles (Walta Information Center
Published on 15 November 2017)

The Ethiopian government provides incentives for domestic investors for different investment areas. The investment regulation no 270/2012 states that for investors invested in the manufacturing of motor vehicle they will get exemption from income tax for two years for Addis Ababa and special zone of Oromia surrounding Addis Ababa and exemption from income tax for three years for the investment in other areas of the country. In order to improve the revenue of the country the government imposed the excise tax on luxury goods and basic goods which demand is in elastic. Motor passenger cars, Station Wagons, utility cars, and Land Rovers, Jeeps pickups, similar vehicles (including motorized caravans); whether assembled together with their appropriate initial equipments are taken as luxury goods. The Excise Tax Proclamation no 307/2002 states that the excise tax shall be paid when imported and also when produced locally. Base for the computation of excise tax is in respect of goods imported cost insurance and freight (CIF) and in respect of goods produced locally the cost of production will be the base for computation for the excise tax.

As the above data shown significant growth of the country Economic and total number of population growths some car assemblers in the industry emerging, car assembly industry is considered as one of good opportunity for car buyers of the country and also contribute to the economy. However, currently the industry facing a lot of challenges to develop the sector since established. Some related challenges are; a lot of imported new and used cars enlargement, government's limited policy advantages for the industry, and related factors which does not encouraged the local assembler in Ethiopia. Now days automobile for Ethiopian people no more

considered as luxury once, it occupies a part of day- to-day life and has become a necessity. Customers have now changed their attitude that yesterday's luxuries are today's necessities. Therefore under this study **is intended to** assessed and show opportunities and challenges in local car assembling industry in Ethiopia, which critically challenges the industry and also identify the opportunities that enhance the development of the industry and encourage car acquisition by the customers.

1.3 Research questions

Based on the opportunities and challenges of the industry stated in the study, the researcher develop the following research questions

- Which laws, policies and procedures are difficult for the industry?
- What opportunities are created by Ethiopian local car assembly industry?
- Which challenges are barrier for the car assembly industry in Ethiopia?

1.4 Research Objectives

1.4.1 General objective

The main objective of this study is to analyze and suggest solutions for the local car assembling industry's opportunities and challenges in Ethiopia

1.4.2 The specific objectives of the study are -

- Clearly identify and view which laws, policies and procedures are difficult for the industry.
- Distinguish the country's automobile assembling industry opportunities
- Distinguish the country's automobile assembling industry challenges

1.5 Significance of the study

This research paper tried to analyze and show the practice of local car assembling industry in Ethiopia that helps to -

- The research result would add values to the existing member and new entrants to the industry that show clear picture as reference.
- The research outcome may help the country and different policy makers who are directly connected with the industry as an input to Ethiopian revenue and customs authority, national bank of Ethiopia and Ministry of finance and economy development.
- The research could also be an input for other researchers who are intended to undertake further study in the area.

1.6 Scope of the study

The research covered the local car assembling industry members' opportunities in Ethiopia who are engaged in assembling automobiles its cylindrical capacity up to 3000 CC. but it excludes-

- Passenger cars/automobiles which are not beyond their cylinder capacity 3000 cc
- All local automobile assemblers in the industry are included but the study does not regard as other heavy trucks' body and trailer makers.

Although, the policies and procedures are equally applied to all assembly factories in the industry but the purpose or use of the vehicles are entirely different.

1.7 Limitations of the study

Conducting a study for all possible serious challenges of local automobile assembly industry in the country needs detail searching for the area under discussion of the industry fate, in order to develop the sector. Applying and using different parameters to investigate over each challenges

of the sector. Unluckily, nowadays in Ethiopia it's difficult to get organized information from government organizations, private importers, assemblers and other associated participant parties in the sector, to investigate over each challenge.

1.8 Operational definitions

Manufacturing is a wealth-creating sector of an economy, and closely connected with engineering and industrial design and provides important material support for national infrastructure.

Car Assembly plant is generally constituted of Trim Line, Chassis Line, and Final Assembly Line. Trim line assembly operations are carried out in logical sequence and differ from manufacturer to manufacturer.

Excise Tax this is imposed and payable on selected goods, such as, luxury goods and basic goods which are demand inelastic. In addition, it is believed that imposing the tax on goods that are hazardous to health and which are cause to social problems will reduce the consumption thereof.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1 Ethiopian Manufacturing Sector Status

The Ethiopian government has initiated a new push towards creating framework to ensure economic and social development. The International Monetary Fund (IMF) ranks Ethiopia as among the five fastest growing economies in the world. After a decade of continuous expansion (during which real GDP growth averaged 10.8% per annum), in 2013/14 the economy grew for its 11th consecutive year posting 10.3% growth. Ethiopia's economy is based on agriculture, which accounts 40.2 % of GDP, 60 % of the export earning, and 80 % of total employment. The industrial sector accounts 14.3% of GDP, 9.5 % of total employment, and 21.2 % of export earnings. While the service sector accounts for 46.2% of GDP Ethiopian manufacturing sector contribute for export, employment and national output. The sector accounts for 70% of the industrial sector. Within the manufacturing sector, the agro-processing subsector (food and beverage subsector hereinafter) is the largest subsector, accounting for 36% of the total gross value of production (GVP) and 38% of the value added at basic price (VAMP) of large and medium scale manufacturing industry (CSA, 2014). The number of manufacture which was 408 in 1980/81 increased to 2,610 in 2012/13. Declining growth between 1980 and 1991(408 to 283), lower growth between 1991 and 2001 (283 to 909), modest growth between 2001 and 2013(909 to 2610). An overview of Ethiopian manufacturing sector (2014).

Among the large and medium manufacturing processors, which total 2,610 manufacturers, 670 establishments are in the food and beverage subsector and employed more than 67,000 people, followed by non-metallic mineral products, metal and engineering products, wood and paper products, rubber and plastic products, chemical and chemical products, leather and leather products and textile products industries with 544, 433, 196, 154, 143, 141 and 104 total establishments for each and 17,230, 13,238, 14,064, 10,984, 9,801, 14,019 and 19,233 total jobs created again by each categories for the year 2012/2013(2005 E.C.) according to CSA report.

Manufacturing is a wealth-creating sector of an economy, and closely connected with engineering and industrial design and provides important material support for national infrastructure. It involves the mechanical or chemical transformation of materials or substances into new products. It makes products from raw materials by the use of manual labor or machines and is usually carried out systematically with a division of labor. In a more limited sense, manufacturing is the fabrication or assembly of components into finished products on a fairly large scale (CSA, 2012).

The government of Ethiopia liberalized the economy since 1991. The government has designed and adopted Agricultural Development Led Industrialization (ADLI) strategy to eradicate poverty. The Industry Development Strategy of the country has put in place the principles that primarily focus on the promotion of agricultural-led industrialization, export led development, and expansion of labor intensive industries. As clearly stated in the country's industrial development strategy, value adding private sector is considered the engine of the sectors' growth. In five three year Growth and Transformation Plan (GTP) implementation of the country, the industry sector received utmost emphasis by way of encouraging export based and import substituting industries. Vertical and

horizontal linkages between agriculture and industrial sector have been promoted. This also stress the commercialization and agro-industrialization of the agriculture sector and value chain approach.

Despite the tremendous efforts made and the economic growth achieved, the Ethiopian economy remains beleaguered by structural problems. The manufacturing sector in Ethiopia is still at its infancy. In comparison with the agriculture and service sectors, the manufacturing sector, for example, has a limited share in terms of production, employment, and exports. Thus, the Ethiopian economy needs a more dynamic growth so that it can reduce its dependence on the fragile, rainfall dependent, and climate change vulnerable agricultural sector. (An overview of Ethiopian manufacturing sector), (2014).

2.1.1 Productive Capacity and Capacity Utilization of the Manufacturing Sector

The industry sector constitutes mining and quarrying, manufacturing, construction, electricity, and water. In Ethiopia the low productivity and hence the competitiveness of the manufacturing industry has been largely attributed to a variety reasons, the major ones being the sector's use of obsolete machinery, lack of skilled man power and application of backward production technology. In order to enhance its productivity, the sector has to address its critical obstacles. From the industry sub-sector, the manufacturing firms in Ethiopia were utilizing only 54. 3 percent of their production capacity. In other words, 45.7 percent of the total capacity remained unexploited. Average capacity utilization of the textile, leather, agro-processing and pharmaceutical industries in 2009/10 was at 40pc, 10pc, 60pc and 30pc, respectively. According to CSA's quarterly manufacturing business survey, a relatively high degree of capacity utilization was observed in manufacture of wood and wood products and cork (99.8 percent) while a low level of capacity utilization was recorded in manufacture of furniture (26.93 percent).

The main reasons for the observed under capacity utilization rate differ from time to time. Nevertheless, shortage of raw materials, lack of demand /market/, increased entry and hence sharing of existing market, interruption of power and water supply are seem to be the main and more persistent reasons for under capacity utilization. Close to 62% of manufacturing establishments reported lack of market demand as a major cause for not operating at their full capacity, while problem with electricity and water was quoted as a reason by 13.9 percent of the manufacturing firms. Despite the problem of idle capacity, new firms joined the food and beverage, textile, chemical and other non-metal sub-sectors. This amounts to misallocation of scarce resources, which could have been used in other potential areas. In order to avoid misallocation of scarce resources, government has to provide the full information that an investor has to have before deciding to invest.

2.1.2 Access to Raw Materials for Manufacturing Sector and Technology Utilization

High dependency on imported raw materials and intermediate goods has remained the distinguishing feature of the Ethiopian manufacturing sector. The main reasons for high dependency on imported raw materials were unavailability of raw materials in the local market and lack of sufficient local supply. Inadequate and poor quality imported raw materials and technologies, along with low level of technical skills, top the lists of the problems facing the sector. Series of surveys conducted by the Central Statistical Agency (CSA) on the manufacturing sector consistently reported that more than 50pc of firms claim that their first major reason for their low capacity utilization is inadequate and poor quality raw materials. This calls for a concerted effort both by government and other stakeholders to seek ways and means of enhancing domestic production of manufacturing raw materials thus reducing the outflow of the scarce foreign currency. (An overview of Ethiopian manufacturing sector), (2014).

Technological change occurs through the process of innovation, invention, and diffusion that leads to the transformation of ideas and knowledge into tangible products that have highly utility to human needs. As technology advances, the systems of production become capital intensive and labor saving. In a labor abundant country, labor intensive industrialization strategy is suggested. Given its endowment, Ethiopia pursues this strategy. The recent development, however, shows increased capital intensity of the manufacturing industry. The traditional labor-intensive sub-sectors like textile and leather have started moving towards capital-intensity, which entails lower employment opportunities for the growing population, university graduates and rural-urban migrants. The problem emanates from inappropriate technology choice. Since the country does not produce capital goods, investors just pick available machinery without bothering its appropriateness to the endowment structure.

2.1.3 Investment Incentives

Despite due focus given to the large, medium, and small scale manufacturing industries in government development plan, the performance registered so far is unsatisfactory suggesting that the dire need for examining the sector's growth constraining factors that hamper it from playing a leading role. Towards this end, the government has provided attractive incentives packages for investment in the manufacturing sector. Investment Proclamation number 768/2012 has listed duty draw-back, voucher, bonded export factory, manufacturing warehouse and bonded input supply schemes as important tools to promote manufacturing and export. The Ethiopian tax law allows for a duty free importation of raw materials and machinery, equipment for manufacturers. However, a significant size of investment has not been flowing into the sector as expected mainly due to the existence of other highly and rapidly rewarding businesses against longer payback periods of investment in industry.

2.1.4 Firm Scale and Employment

The scale of manufacturing industries varies by ownership structure. Public owned manufacturing industries are mainly large scale while privately owned are mostly medium scale. Employment generation is a key factor in the promotion of the manufacturing industry. Transformation towards industrialization entails increased share of employment, value added, and export earnings of the manufacturing sector in the economy. However employment in the large and medium scale manufacturing industries is not satisfactory. An overview of Ethiopian manufacturing sector (2014).

2.1.5 Back ground of the manufacturing sector

Ethiopia's manufacturing sector is among the key productive sectors of the economy identified under GTP I (2010-2015) which can spur economic growth and development because of its immense potential for wealth creation, employment generation and poverty alleviation. The manufacturing sector makes an important contribution to the Ethiopian economy and employs about 173 thousand people in the year 2012/2013. (An overview of Ethiopian manufacturing sector (2014).

The sector had about 2,610 manufacturing establishments in the same year and it is divided into eight broad subsectors namely food and beverage products, textile and apparel products, leather and leather products, wood and pulp products, chemical and chemical products, rubber and plastic products, other non-metallic minerals products and metal and engineering products industries. The top two manufacturing subsector; food and beverage and metal and engineering industries accounted for 51% of the sector's GDP and the food and beverage sector alone accounted 38% of the employment in the sector in the year 2012/2013. The manufacturing sector contribution to the GDP in 2012/2013 was 4.8%. The performance of the sector has been affected by low productivity of workers and use of obsolete technologies which is attributed to the poor state of physical infrastructure, limited access to finance, limited research and development, poor institutional

framework, and inadequate managerial technical skills. (An overview of Ethiopian manufacturing sector, 2014).

2.1.6 Production and Value addition

Gross value of production by manufacturing sector worth about 113 billion birr in 2012/2013; and value added generated is estimated to reach 32 billion birr in the same year, which was about 4% of the value addition to the entire economy in the same year. The largest value addition was come from the food and beverage subsector, which was around 8 billion birr in 2012/2013, followed by non-metallic mineral subsector (4.3 billion birr) and metal and engineering subsector (3.9 billion birr) while the smallest contribution came from textile and apparel industry (396 million birr).

2.1.7 Sources of Finance

Total value of fixed capital assets in Ethiopian manufacturing sector estimated to reach 40 billion birr in 2012/2013 and the new investment in fixed capital for the same fiscal year worth around 3.7 billion and investment in food and beverage industries was the highest (1.6 billion birr) (AACCSA, 2014). Annual wage and salary expenditure also reached around 10 billion Birr in the same year. Domestic banks were major sources of finance for most projects in Ethiopian manufacturing industries. The survey result revealed that of the total 270 manufacturers interviewed for this study purpose, about 62% of them reported that domestic banks are their main financier followed by own saving (16.8%), foreign investment/partners (9.5%) and domestic capital market (5.7% each).

2.1.8 Market Structure and Export Trade Destinations

Most products produced by the manufacturing subsectors consumed by domestic users. For example, 49.7% of the interviewed companies in this study responded that domestic market is the main market destination for their final product. Despite limited proportion of domestically produced manufacturing goods are currently exported to the external word, finding of the survey also indicated

that African countries are the major export destinations, which got responses of 26% of the interviewed industries followed by North America (11.2%), Western Europe (10.7%) and Asia (8%) while other areas had very insignificant share. Leather, textile and agro-processing products account the major export item of the country.(An overview of Ethiopian manufacturing sector,2014).

2.1.9 Government Incentives and Free Trade Market Opportunities

About 30%of the enterprises rated investment and export trade incentives offered by the government as “good” while most firms (about 40%) in the manufacturing sector are unclear about the practicality of exporting using free trade agreements or preferential market opportunities.

2.1.10 Definition of Car

A car is a wheeled, self-powered motor vehicle used for transportation and a product of the automotive industry. Most definitions of the term specify that cars are designed to run primarily on roads, to have seating for one to eight people, to typically have four wheels with tyres, and to be constructed principally for the transport of people rather than goods (Fowler, F.G., eds. (1976). The year 1886 is regarded as the birth year of the modern car. In that year, German inventor Karl Benz built the Benz Patent-Motorwagen. Cars did not become widely available until the early 20th century. One of the first cars that were accessible to the masses was the 1908 Model T, an American car manufactured by the Ford Motor Company. Cars were rapidly adopted in the United States of America, where they replaced animal-

drawn carriages and carts, but took much longer to be accepted in Western Europe and other parts of the world (<https://en.wikipedia.org/wiki/Car>).

Cars are equipped with controls used for driving, parking, passenger comfort and safety, and controlling a variety of lights. Over the decades, additional features and controls have been added to vehicles, making them progressively more complex. Both fuels cause air pollution and are also blamed for contributing to climate change and global warming. Vehicles using alternative fuels such as ethanol flexible-fuel vehicles and natural gas vehicles are also gaining popularity in some countries. Electric cars, which were invented early in the history of the car, began to become commercially available in 2008.

There are costs and benefits to car use. The costs of car usage include the cost of: acquiring the vehicle, interest payments (if the car is financed), repairs and auto maintenance, fuel, depreciation, driving time, parking fees, taxes, and insurance. The costs to society of car use include: maintaining roads, land use, road congestion, air pollution, public health, health care, and disposing of the vehicle at the end of its life. Road traffic accidents are the largest cause of injury-related deaths worldwide (Peden M; Scurfield R; Sleet D (eds.) (2004)) As linked with <https://www.loc.gov/rr/business/BERA/issue2/manufacturing.html>) the automobile is a commonly used product, it is an extremely complex and technologically sophisticated one. Manufacturing new cars requires state-of-the-art technological methods and processes. In addition, supplier industries of the automotive manufacturing industry, such as steel and other parts as well as electronic instrumentation, are vital in providing the necessary supplies and components for assembling motor vehicles. Elements of Automobile Manufacturing are consists of cost, durability, product development, process development, flexibility, facilities/equipment,

technology & process, work force and organization, logistics and supply chain, research & engineering, interfaces.

2.1.11 Assembling process

The manufacture of motor vehicles involves the manufacture and assembly of the final product from a number of metallic, plastic and electrical components. A wide range of processes are involved including metal cutting, pressing, polishing, grinding, welding, plating, & painting. Assemble means to bring together or gather into one place, company, body, or whole; and/or to put or fit together; put together the parts of: to assemble information for a report; to assemble a toy from a kit. (<http://www.dictionary.com/browse/assembling>)

Component or end item comprising of a number of parts or subassemblies put together to perform a specific function, and capable of disassembly without destruction. What may be an assembly at one point, however, may be a subassembly at another.

In an assembly line, car assembly is split between several stations, all working simultaneously. When one station is finished with a car, it passes it on to the next. By having three stations, a total of three different cars can be operated on at the same time, each one at a different stage of its assembly. (<http://www.businessdictionary.com/definition/assembly.html>).

Assembly of some 2000-3000 interior and exterior parts as well as major components is fitted on painted body in assembly plant that is generally constituted of: Trim Line, Chassis Line, and Final Assembly Line. Trim line assembly operations are carried out in logical sequence and differ from manufacturer to manufacturer. The car bodies from trim line are picked up by overhead conveyor of chassis line that may be power and free type. In final assembly, all the remaining fitments are carried out. With equipment dependent on sophistication level, the

different consumables are injected in the car to the desired quantity measure. Items are Engine oil, Transmission oil, Gasoline/diesel, Window washer liquid, Radiator liquid, Brake oil.

Different parts are handled in different ways. Some require bolting; others are just inserted, till others are fitted together. Sealing, wiring and other processes are also carried out. Basic assembly work consists of compound operations which include grasping, handling, positioning and adjusting of parts. Each of these operations requires many closely controlled steps to assure high quality. Control of position and attitude is also required in adhesive application and similarly for alignment of head lamp. An assembly line is a manufacturing process (most of the time called a progressive assembly) in which parts (usually interchangeable parts) are added as the semi-finished assembly moves from workstation to workstation where the parts are added in sequence until the final assembly is produced. By mechanically moving the parts to the assembly work and moving the semi-finished assembly from work station to work station, a finished product can be assembled faster and with less labor than by having workers carry parts to a stationary piece for assembly. Assembly lines are common methods of assembling complex items such as automobiles and other transportation equipment, household appliances and electronic goods. (https://en.wikipedia.org/wiki/Assembly_line)

2.1.12 the principles of assembly are:

(1) Place the tools and the men in the sequence of the operation so that each component part shall travel the least possible distance while in the process of finishing.

(2) Use work slides or some other form of carrier so that when a workman completes his operation, he drops the part always in the same place—which place must always be the most

convenient place to his hand—and if possible have gravity carry the part to the next workman for his own.

(3) Use sliding assembling lines by which the parts to be assembled are delivered at convenient distances.(Ford, Henry & Crowther, Samuel ,1922).

With increased competition in the automobile market, more attention has been given to managing variations in automobile body assembly processes. Dimensional variation affects fit quality and functionality. Typically, the automobile body assembly process comprises numerous steps, utilizing 300–500 compliant sheet metal parts, 50–120 assembly stations and 3000–6000 spot welds. Each step in the process is capable of contributing a degree of variation. Those variations in turn act on one another to compound distortion in the final products. The complexity of this interaction places severe demands on the existing methods of simulation, which currently fall far short of satisfaction. (Min Hu, ZhongqinLina et.al, 2001)

2.2 Ethiopia Wants To Be Africa's No. 1 Auto Manufacturer

Local assembly plants in Ethiopia's fledgling auto industry plan to begin exporting cars in a couple of years in a market dominated by Chinese brands, part of an effort to industrialize the agrarian economy, Reuters reports.

It's a grand ambition for the tiny auto industry, transforming a handful of assemblers that bolt together imported kits into a network of factories that can make the country Africa's biggest car manufacturer over the next two decades. If it succeeds, it won't be the first time Ethiopia delivers on an ambitious goal. With one of Africa's fastest growing economies for more than a decade, Ethiopia has pulled off the Grand Ethiopian dam and others that helped make it an

electricity exporter. Ethiopia's expanding transport network includes the successful Ethiopian Airlines, the largest and fastest growing African airline, according to Ghana Web. Ethiopian Airlines won the African Airline of the Year Award 2016 at the 25th Anniversary African Aviation Air Finance Africa Conference & Exhibit in Johannesburg.

This year, a railway will link the landlocked country, population 97 million, to Djibouti port where the Red Sea meets the Indian Ocean, providing a cheap and fast way to import raw materials and export finished goods. "The aim is to become a leading manufacturing hub in Africa," said State Minister for Industry Tadesse Haile in a Reuters interview. "We want to become the top producer of cars on the continent in 15 or 20 years." In industrial zones around Addis Ababa and the northern city of Mekelle, Ethiopian firms and Chinese partners assemble vehicle kits. They imported 38,000 assembled cars in 2015, a 50 percent-plus increase over 2014.

(JUNE 14, 2018 <https://www.reuters.com/article/ethiopia-autos>)

2.2.1 Africa business- Ethiopia to expand tiny car assembly business in industrial drive

Min Read

- * Ethiopia seeks to industrialize poor, agrarian economy
- * Chinese brands dominate vehicle assembly business
- * Local assemblers plan exports in two years or so
- * Ethiopia's car firms still minnows, even in Africa

Ethiopia has grand ambitions for its tiny auto industry, seeking to transform a handful of assemblers that bolt together imported kits into a network of factories that can make the country Africa's biggest car manufacturer over the next two decades. (JUNE 14, 2018 <https://www.reuters.com/article/ethiopia-autos>)

It is part of a vision to turn a nation that is among the poorest in Africa into an industrial centre that no longer relies on fickle weather patterns that periodically devastate the agrarian economy and leave its people hungry. Plans are taking shape in industrial zones around Addis Ababa and the northern city of Mekelle, where Ethiopian firms and Chinese partners assemble the vehicle kits.

Ethiopia produces about 8,000 commercial and other vehicles a year for the home market, about a quarter of which are cars. But executives say they have capacity to make more if they could obtain extra foreign exchange to import kits in greater numbers. The nation imported more than 38,000 assembled cars in 2015, a more than 50 percent increase on 2014.

“There is a lot of potential for growth,” said Ma Qun, deputy manager of China’s Lifan auto group in Ethiopia, which has the capacity to assemble 5,000 cars a year but whose output is less than a fifth of that. “We want to start exporting from Ethiopia by 2018, or a year later,” he said.

For now, Ethiopia is a minnow in African terms. South Africa and Morocco are involved in the full manufacture of vehicles annually making more than 600,000 and 200,000, respectively. Egypt, Sudan and Kenya also assemble vehicles. The scale of the challenge is formidable. South Africa boasts a big domestic market to drive the industry with annual per capita income of \$6,800 compared to Ethiopia’s meager \$550, according to World Bank data for 2014. Morocco, with annual per capita income of about \$3,070, lies only a short distance across the water from the huge European market.

Assemblers in Ethiopia, which put together Chinese brands Geely, FAW and BYD as well as Lifan, face other obstacle, notably in obtaining dollars to import kits given the nation’s scant currency reserves. They are also battling to reassure consumers about quality. But Ethiopia has delivered on ambitious targets before, boasting one of Africa’s fastest growing economies for

more than a decade. New dams have turned the country into an electricity exporter and it has a rapidly expanding transport network. “The aim is to become a leading manufacturing hub in Africa,” State Minister for Industry Tadesse Haile told Reuters. “We want to become the top producer of cars on the continent in 15 or 20 years.” This year, an electrified railway will link the land-locked nation of 97 million people to Djibouti port where the Red Sea meets the Indian Ocean, providing a cheap and fast way to import raw materials and export finished goods.

(JUNE 14, 2018 <https://www.reuters.com/article/ethiopia-autos>)

2.2.2 New fleet

China, which has become a close development partner for a nation whose state-led economic model has closely mirrored the Chinese approach, is building the railway. Chinese car firms are now at the centre of Ethiopia’s vehicle manufacturing plans. An executive at one Ethiopian manufacturer said Chinese car kits were cheaper than those from rivals, such as in Japan. “They are helping us in marketing,” he added, asking not to be identified. Ethiopia desperately needs a new fleet of cars. The streets of Addis Ababa are filled with dilapidated vehicles. Some of the ubiquitous blue and white taxis are rattling Soviet-era Ladas built in the 1980s. Many of its imports are used vehicles. A new middle class is slowly emerging to push up demand, even though the growth forecast for 2016 has been cut to 7 percent from 10 percent because of a drought that has left 10 million people hungry.

To encourage the industry, Ethiopian-assembled cars receive tax breaks when local input exceeds 10 percent, executives said. One of the Geely models put together in Ethiopia sells for 300,000 birr (\$14,000), while an already completed imported version would cost about 450,000. A 10-year-old Japanese-built Toyota Corolla, by comparison, also sells for about 450,000 birr.

The industry is still based on fixing together “semi-knockdown” kits that come in a 1,000 or so pieces each. But the aim is to shift to “complete knockdown” kits, requiring greater local input, in five years or less, the minister said. “We are working on that,” said Endalkachew Mekonnen, automotive marketing manager at Mesfin Industrial Engineering, which assembles Geely sedans. His firm plans to use “complete knockdown” sets in the next two years, he added.

Mesfin assembles Geely’s CK1 and SL sedans, Belayab Motors puts together FAW Vela saloons, while Betret International in partnership with BYD makes the BYD-F3 sedan. The biggest producer Lifan offers vehicles ranging from its 530 sedan to the X50 and X60 SUVs. The commercial truck business is dominated by state-owned METEC, which assembles SINOTRUK and other models, executives said. Some pickups and tractors are also assembled in Ethiopia. (JUNE 14, 2018 <https://www.reuters.com/article/ethiopia-autos>)

2.2.3 Forex constraints

A major constraint on the car industry is sourcing dollars. “For example, if we apply for \$500,000 for a month’s worth of shipments, the bank will give us \$200,000 for two months,” Lifan’s Ma said. “This is a challenge.” Similarly, Belayab Motors completes about 500 cars a year, but an executive said it could lift output to 1,000 with extra shifts and more dollars. With huge infrastructure projects the priority, the central bank is frugal when doling out foreign exchange on imports. Ethiopia’s foreign reserves were \$3.3 billion at the end of June last year, the equivalent of just two months of imports, according to the International Monetary Fund. Neighboring Kenya usually has four months covered and, for now, has five months. “We are working on improving conditions for all manufacturers. We hope to ease shortages in the near future,” minister Tadesse said. The IMF has urged Ethiopia to offer more support for private

business. “Success going forward will depend critically on a greater role for the private sector,” it said in September. The list of foreign investors in Ethiopia is growing, ranging from brewer Heineken to private equity firm Kohlberg Kravis Roberts (KKR). But the tight currency controls are cited by potential investors as a major deterrent. Ethiopia’s car assemblers face another challenge, namely that their cars do not hold their prices as well as finished imports. “The big obstacle they face is resale value,” said Araya Lakew, whose mekina.net website links buyers and sellers. Some used imports, such as Toyotas, even rise in birr terms with the weaker currency, unlike locally assembled models. Lifan’s marketing director Tomi Su said his firm would keep making their models more attractive to consumers. “There will be new gadgets in every upgrade,” he said. (\$1 = 21.5000 birr) (Writing and additional reporting by Edmund Blair in Nairobi; Editing by David Stamp). (JUNE 14, 2018 <https://www.reuters.com/article/ethiopia-autos>)

2.2.4 Asoko Sector Brief – Ethiopia Vehicle Assembly Q3 2017

In Ethiopia, a country with the lowest level of car ownership in the world, a concerted government effort to increase automotive manufacturing is beginning to bear fruit, although domestic demand is still low. Late May saw the launch of the Mekelle Engine Production Factory in Ethiopia’s Tigray State. The country’s first engine manufacturing plant, Mekelle fall under the umbrella of the state-owned Metal and Engineering Corporation (METEC), one of the parent company’s fifteen subsidiaries. The \$15 million enterprise, which took two years to build, will cater to local demand for vehicle and machinery components, given that engines and parts currently must be imported to the country. The plant will produce a range of engine types and sizes – for transport, industrial and agricultural use – with a production capacity of 20,000 engines annually. The demand for the new facility is clear: according to Mekelle representatives, in 2016 Ethiopia imported \$515 million worth of engines; by April of this year the figure had

already exceeded \$100 million. METEC is also expanding other auto-related manufacturing subsidiaries. State-owned heavy vehicle manufacturer Bishoftu Automotive Engineering Industries, also owned by METEC, recently finalised work on a new \$15.2 million cabin manufacturing plant. The facility has two production lines. The first will focus on pickup trucks, with a capacity of 11,000 cabins annually, while the second, who has a capacity of 13,000 units annually, will concentrate on larger vehicles. The factory will serve assemblers of heavy-duty commercial and military vehicles.

These push by Ethiopia's parastatals is part of a broader growth in the sector, with a handful of foreign automotive firms also moving into the country. Most recently, in September 2016, South Korea's KIA Motors and Belayab Motors signed a deal for a \$6.5 million assembly plant for KIA branded vehicles outside of Addis Ababa. The factory, which began production in May, has a capacity of 3,000 vehicles per year currently, with the potential to expand to 9,000 units.

The KIA-Belayab partnership follows the inauguration of a \$1.2 million assembly line (adjoined to an existing facility) in July of last year by French firm Peugeot and Ethiopia's Mesfin Industrial Engineering (MIE). The Tigray project currently produces three Peugeot vehicle types, with a capacity of 1,200 units annually.

Peugeot is MIE's four partnership with an international automotive manufacturer, following similar ventures with Germany's MAN, China's Geely and International Tractors of India. In March 2016 MIE launched its 'Completely Knocked Down' (CKD) production line for MAN vehicles, with a capacity of 1,000 vehicles annually.

However, while the increase in activity over the past 12 months has been impressive, demand in the country remains limited. Local car ownership in Ethiopia, according to Deloitte, is

the lowest in the world, at roughly two cars per 1,000 Ethiopians. Local producers also face perception issues similar to other African markets, with Ethiopian consumers often considering locally-assembled new cars to be poorly-built and expensive. As a result, the vast majority of sales transactions consist of imported second-hand vehicles – in spite of the fact that cumulative taxes and duties can increase the price to more than double the original sales value – around 85% of vehicles on the roads are second-hand, of which around 90% are Toyotas.

(JUNE 14, 2018 <https://www.reuters.com/article/ethiopia-autos>)

2.3 Ethiopia Population 2018

With one of the highest poverty levels in the world, Ethiopia is considered by many to be one of the most under-developed nations in the world. But within its African boundaries lies a nation filled with a rich culture and heritage. Bordered by Kenya, South Sudan, Sudan, Djibouti, Eritrea, and Somalia, Ethiopia has an estimated 2018 population of 107.53 million, which ranks 14th in the world. With a 2018 population of approximately 107.53 million, up from 2015's estimate of 98.9 million, Ethiopia is the most populous landlocked country in the continent of Africa and the second-most populous country of Africa after Nigeria. This estimate of how many people live in Ethiopia is based on the most recent United Nations projections, and makes Ethiopia the 14th most populous country in the world. The most recent census in 2007 found an official population of 73.7 million. Ethiopia has a population density of 83 people per square mile (214/square mile), which ranks 123rd in the world. Addis Abeba, which has an estimated population of 3.6 million in the city proper and a metro population of more than 4.6 million. Being as old as two millenniums, its cultures and traditions hold family as a significant part of Ethiopian life, sometimes even surpassing the significance their careers or businesses

might have Other major cities include Adama (324,000), Gondar (324,000), Mek'ele (324,000), and Hawassa (302,000). (Population Data via United Nations WPP (2015 Revision, Medium Variant))

2.4 Empirical review

2.4.1 The Automotive Sector in Ethiopia, Kenya and Nigeria

Deloitte undertook in-market research to shed light on the status quo of the automotive sector with the question in mind of which market(s), barring some of the more developed automotive markets in Africa as noted in the previous section, will be the next frontier for growth for the automotive industry. Ethiopia, Kenya and Nigeria were identified for the research based on the following reasons:

- a) Ethiopia** was Africa's fastest growing economy in 2015 and has the continent's second largest population. Ethiopia's automotive potential is underpinned by the state-driven economy and a government that is geared toward industrialization, which makes it the African economy that is most similar and arguably likely to replicate the development successes of China of the mid-1980s onwards.
- b) Kenya** is the largest and wealthiest economy in East Africa and plays an important regional role. Kenya's sizeable middle class, progressive business environment, regional market access and history of automotive assembly position the country well as a potential East African automotive hub.
- c) Nigeria**, as Africa's largest economy, presents a sizeable untapped automotive market with the continent's largest population and relatively high GDP per capita. For this reason,

Nigeria has generated the most interest among automotive players as a future market in Africa. Nigeria also has a legacy of having sizeable assembly plants.

Source: (Ethiopian Ministry of Transport; Ethiopian Road Transport Authority; In-market interviews; World Bank; IMF; KMI; OICAD Deloitte Africa Automotive Insights Navigating the African Automotive Sector: Ethiopia, Kenya and Nigeria)

2.4.2 Vehicle sales in Ethiopia

There is almost no publicly available reliable data on vehicle sales in Ethiopia. It is however estimated that 18 000 vehicles are brought into Ethiopia each year.

The majority of these are second-hand vehicles. Each year, 2 000 new Toyotas and between 5 000 and 7 000 used Toyotas are imported.¹⁸ In total, Toyota controls approximately 65% of the total market (new and second-hand) due to its reputation as being reliable and inexpensive to maintain.

The main drivers of new commercial vehicle sales are construction, agri-business and retail while passenger vehicle sales are driven by government (including diplomatic corps) purchases. Due to low disposable income, the absence of vehicle finance facilities and the ban of vehicle leasing schemes,¹⁹ personal vehicles remain out of reach for the majority of the population. Limited availability of foreign exchange to purchase imports also restrains access to vehicles.

2.4.3 Production and assembly

The Ethiopian Investment Commission (EIC) reports that 31 foreign vehicle investment projects (largely Chinese projects but also some involvement of European companies) and 73 domestic vehicle assembly investment projects have been licensed since 1998. This means that a total of

104 companies have been licensed for vehicle assembly in the country over the past two decades. However, only a few of these are operational, with the vast majority licensed at the pre-implementation stage.(Domestic assemblers, 2015 In-market interviews and company websites, 2016).While actual production numbers are not available, a number of assemblers indicated that plants were not operating at full capacity due to the current limited market size and inadequate access to foreign exchange to cover imports of Semi Knocked-Down (SKD) kits.During the past decade, a number of leading international automotive companies have carried out market scoping exercises to assess the viability of Ethiopia as an assembly hub. However, due to the limited market size, large-scale investments by these automotive firms have not yet materialized.

While SKD production currently takes place, companies such as BAI are looking to move to Complete Knocked-Down (CKD) kits and possibly the full production of vehicles within the next five years. BAI dominates the local production market, with a number of private sector players perceiving it to be difficult to compete against the state-supported assemblers in the current environment. BAI also benefits greatly from local government patronage of its products, especially buses used for public transport schemes in Addis Ababa.Although a number of assemblers source some components such as tires locally, Ethiopia has no defined local content requirement. A number of assemblers indicated that they are instructed that local content should be approximately 30% in order to qualify for the 30% tax incentive associated with all local manufacturing, but that no written agreement exists between assemblers and the state.

Due to Ethiopia's tax system, which subjects vehicles to tax depending on their engine size rather than age or origin, it is often cheaper to import a second-hand vehicle with a smaller engine size than it is to assemble a vehicle locally, despite import taxes on these

vehicles. Ethiopia is subject to foreign exchange controls and exporters are given preferential access to foreign exchange. Insufficient availability of foreign exchange causes inefficiencies and planning challenges for importers of SKD kits, Fully Built-Up (FBU) units and parts (for assembly or repair) and inhibits the growth of the assembly and retail market.

2.4.4 Policy environment

The Ethiopian government has been targeting both public and private investment into value-added manufacturing, in an effort to diversify the economy away from agriculture. Ethiopia is making a substantial effort to link into global value chains by targeting export-orientated manufacturing and has attracted a number of investors into the garment and textile industry. This is seen to support the government's goal of becoming a middle income country by 2025. The manufacturing sector has been selected as a high priority sector by government. As a result, Ethiopia's economic policy, the second Growth and Transformation Plan (GTP II), aims to support and grow the manufacturing contribution to GDP from 4% in 2014 to 8% by 2020. This is supported by attracting investment through industrial parks and extending incentives, including tax incentives, to foreign investors.

2.4.5 Vehicle sales in Kenya

According to the KNBS, a total of 112 536 vehicles were registered in 2015 – this included newly registered and re-registered vehicles.⁴⁰ KNBS does not differentiate between the registration of new vehicles and the re-registration of used vehicles, whereas the Kenya Motor Industry (KMI) only records new vehicles sold. KMI states that 19 523

new vehicles were sold in Kenya in 2015, reflecting the dominance of used vehicles in the retail market. In 2015 light and heavy commercial vehicles combined accounted for 86% of total vehicle sales, highlighting the importance of larger vehicles, such as light commercial vehicles, minibuses, heavy trucks, and buses. Sedans and SUVs made up 14%.⁴¹ Heavy commercial vehicles too saw the highest growth, with a CAGR of 17.5% between 2005 and 2015 and thus were key drivers underpinning new vehicle sales growth over that period. Sales of new vehicles in Kenya are driven by the demand for transportation in the construction, mining, agri-business, tourism, energy and retail sectors. The government and in particular its law enforcement and security authorities are significant buyers of new vehicles.

2.4.6 Production and assembly

Kenya's automotive market is largely focused on retail and distribution of vehicles, and after-sales support in servicing and spare parts sales. Small scale assembly of motor vehicles is done at three assembly plants, the General Motors East Africa (GMEA) plant in Nairobi, the Associated Vehicle Assemblers (AVA) plant in Mombasa and the Kenya Vehicle Manufacturers (KVM) plant in Thika. All three of the plants are operating below their capacity. However, the country's good infrastructures, relative to other countries in the region, as well as its physical and strong economic position within the East Africa Community (EAC), make it a potential hub for automotive assembly and production in the region. Recently, the Counties have been lobbying with investors to set up manufacturing hubs in their regions to provide employment and promote trade within their jurisdictions. In February 2016, Machakos County signed a deal with Ashok Leyland to set up an assembly plant in the County before the end of 2016.

2.4.7 Domestic assembly plants,

Locally produced vehicles are assembled from CKD kits with minimal locally produced inputs.⁴³ KMI defines CKDs as a package of most or all of the individual parts of a vehicle, as separate pieces. All of the pieces are brand new from their country of origin.

As Kenya does not locally assemble sedans (except occasionally on an ad hoc basis), commercial vehicles dominate Kenya's domestic production – a similar focus employed in the early stages of Thailand's automotive sector. In 2015 Kenya assembled 9 295 vehicles, of which 921 (close to 10% of assembly) were light commercial vehicles (LCVs) such as pick-up trucks, and the rest of the 9 295 were heavy commercial vehicles (HCVs) such as trucks and buses.

The assembly of motor vehicles in Kenya grew by 31.4% from 2013 to 2014. High growth of 54.4%, 43.7% and 20.8% was registered in the production of pick-ups, trucks and buses respectively.⁴⁵ Kenya's vehicle assembly figures are forecasted to almost double between 2013 and 2019.

2.4.8 Policy environment

The Kenyan government has identified the automotive and auto parts industry as a major economic driver in the Kenya National Industrializations Policy Framework released in 2010. In order to build up its automotive industry, the framework identified five policy statements. The development of a 40 hectare automotive industrial park in Machakos by 2012; Providing incentives to encourage locally assembled vehicles and the production of

autos parts in order to gradually replace imported second-hand vehicles with locally assembled vehicles; The establishment of a National Automotive Industry committee which would be tasked with developing the automotive value chain and coordinating the industry; Impose high tariffs on automotive parts that could rather be produced locally to encourage the growth of a local industry; and Set up a joint venture with an established automotive manufacturer by 2016 with the goal of domesticating the company within ten years. While to date, most of the goals are yet to be realized, the government has devised a number of policies such as a 30% local input requirement for locally assembled vehicles (although this had not been implemented at the time of writing).

The Kenyan government has also committed to supporting entrepreneurs in the automotive components industry, developing the auto components supply chain, placing high tariffs on imported automotive components that could be manufactured locally and the formation of a national automotive industry board.

2.4.9 Vehicle sales in Nigeria

Despite being the most populous country in Africa, Nigeria's new vehicle sales lag behind less populated countries such as Algeria, Egypt, Morocco and South Africa. According to industry players, the overall new and second-hand market combined ranges between 500 000 and 1 million units per year. Smuggling, grey imports of second-hand vehicles and the lack of reliable data however, make the exact size of Nigeria's vehicle market and fleet size difficult to quantify. Challenges concerning the licensing and identification of vehicles further contribute to this difficulty.

Imported second-hand vehicles, so-called to kunbos, dominate the Nigerian vehicle market as only a small segment of society is able to afford new vehicles. A representative of a leading automotive firm estimates that a mere 2% of the population is able to afford new vehicles given the current economic and financing environment. While commercial banks offer vehicle finance, accessing these credit facilities has become increasingly unattractive to individual consumers as credit facilities are provided at interest rates above 20% per annum and require at least a 10% down-payment.

Commercial banks usually require repayment of vehicle loans within four years, due to the rapid depreciation of the value of vehicles given poor road conditions. According to one of the most established vehicle finance providers, the monthly repayment amount should not exceed 35% of the monthly income of the borrower. (Interviews, Lagos, January 2016).The short repayment-period as well as the high interest rates presents a key challenge for low- and middle-income households when it comes to accessing vehicle finance.Due to the limited accessibility to and expensive financing of vehicles, new vehicles remain out of reach for most Nigerians and the largest share of current vehicle demand comes from the business community. Corporate buyers account for approximately 70% of overall new vehicle purchases, indicating the suppressed demand from private buyers, arguably the market segment with the largest growth potential.

Through recently introduced promotional offers by banks in partnership with selected vehicle dealers, customers are able to access finance at a discounted rate for a limited number of vehicles and models. Indeed, the provision of alternative financing products, especially in-house financing by the automotive companies, is seen by industry players as a key requirement for the growth of the local market.

However, in the absence of affordable finance solutions, second-hand vehicles remain the more attractive option for private vehicle buyers. According to a representative of a leading automotive company, second-hand passenger vehicles accounted for 80% of sales in 2014. The share of tokunbos in the commercial vehicle market is even larger, reaching up to 90% of the market according to a leading commercial vehicle manufacturer.

2.4.10 Production and assembly

Nigeria is no stranger to automotive assembly and manufacturing. Already in the 1970s Nigeria started assembling motor vehicles. In the 1970s and 1980s, the federal government of Nigeria partnered with six international automotive and commercial vehicle manufacturers to produce passenger and commercial vehicles locally from CKD kits. According to the National Automotive Council (NAC) these six companies had an initial installed capacity of 149 000 units per annum during the 1970s and 1980s.

2.4.10 Policy environment

Nigeria's NAIDP, which was gazetted on 29 January 2014, forms part of the five-year Nigerian Industrial Revolution Plan (NIRP), which was officially launched by former President Goodluck Jonathan on 11 February 2014. The NAIDP was developed in consultation with existing local vehicle assemblers and international carmakers, as well as government entities of countries that successfully used policy measures to develop their automotive industries. The content of the policy was made available to the public on 2 October 2013.

- In its current form the plan focuses on the following elements:
- Industrial infrastructure development, in particular supplier parks and clusters

- Skills development
- Homologation certification and standards
- Investment promotion, including fiscal measures

2.4.11 Domestic market development

The fiscal measures which include a sliding-scale of tariffs and levies came into effect in July 2014 and follow the import substitution concept. By increasing the cost of importing FBUs the Nigerian government encourages the establishment of local assembly. The policy takes into account that the current manufacturing output is insufficient to meet local demand hence, providing carmakers with local production an import levy exemption for the import of two vehicles for each vehicle produced. The policy is supported by a ban of imports of vehicles older than 15 years; however, according to anecdotal evidence, the enforcement of this ban is undermined by smuggling and corruption. In order to mitigate this risk, the customs authorities from Benin and Nigeria have intensified efforts to collaborate on this matter and to work towards full compliance with the Economic Community of West African States (ECOWAS) trade agreements.

In addition to vehicle assembly, the NAIDP also aims to build a local component industry that is able to supply components to automotive companies at a competitive price. According to the NAC, the following have been earmarked for local production: welded parts including exhaust systems and seat frames; electrical parts including batteries, indicators and wiring harnesses; plastic and rubber parts including tyres, tubes, fan blades, seat foam, oil seals, hoses and radiator grills; and other parts such as radiators, cables, filters, brake pads, windscreens, side glasses, fibre-glass and paints.

The NAIDP aims to achieve the creation of a well-developed domestic supplier base by following a phased approach. Over four subsequent phases that are intended to last no longer than 12 months each, the level of local content and value addition is set to increase as follows:

SKD 2 Phase 1:

- Vehicle cabin fully trimmed, painted
- Dashboard fitted
- Accessories are installed

Remaining aggregates are supplied loose and are assembled at plant

SKD 2 Phase 2:

- Cabin body fully painted and glazed
- Vehicles are assembled from finished components at plant

SKD 1:

- Cabin body unpainted
- Vehicles are assembled from finished components at plant

CKD:

- Inputs supplied loose for final welding and final assembly

At an initial stage during which local supply of inputs of parts and components is insufficient, assemblers will have to rely on imports. Given this dependency a temporary suspension of the Central Bank of Nigeria's foreign exchange restriction rule should be considered. Under the current regime importers of 41 product lines – including glass and rubber products – are not able to access foreign exchange to secure these imports. This restriction is meant to encourage local production of the banned items; however, various industry players cite this as a key impediment to growing the domestic automotive industry in the short to medium term.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it **the researcher** study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them It is necessary for the researcher to know not only the research methods/techniques but also the methodology. - Methods and techniques: second revised edition In this chapter, the main methodological choices, data collection and reliability and validity are described [(Research methodology) Book Jaipur C.R KOTHARI (May 1990)].

3.1 Research design

The purpose of this research was to discover the” *local car assembling industry in Ethiopia opportunities and challenges*”. To achieve this objective, an exploratory and descriptive research design in the form of a survey was used to collect the data. The research instrument was questionnaire, face-to-face interview was conducted. The target population was all employees in the seven local car assemblers in Ethiopia that assembling vehicles cylindrical capacity less than 3000CC. A purposive sampling technique was used to determine the respondents. The purposive sampling technique was used in order to concentrate on those who have expert knowledge about practices and operations in the automotive industry (senior managers). Therefore, specific participants for interviews were selected from five assembly factory one each.

The data for this study were analyzed descriptively using Statistical Package for the Social Sciences (SPSS). The open-ended responses were used to give more meaning to the respondents' views on questions where it was applicable (Gray, Williamson, Karp & Dalphin 2007:44).

3.2 Data type and source of data

For the purpose of this study both primary and secondary data are used. For this survey source of primary data collected from five Ethiopian local car assembling industry and metal engineering development institute management members through questionnaire, interview and observed factories and offices which are located in Addis Ababa.

Secondary data are the data collected by other party not related to the research study but collected these data for some other purpose and at different time in the past. If the researcher uses these data then these become secondary data for the current users.

Therefore for this study preparation the secondary data are collected from internet, books, Metal Industry Development Institute annual report and other publication were used. Data collected in both primary and secondary were main sources of this study.

3.3 Data Collection tools

(a) Questionnaire

Eighteen structured questions has been organized and prepared to ask and collect answers from respondents, relating to the research topic. This specific number of questions are printed and distributed to be answered by the respondents. In the forms often having blank box to rate their point of view as well as spaces are given in which the answers and reasons can be written. Sets of such forms are distributed and the answers are collected accordingly as related to the research statistically useful information about a given topic.

(b) Interview

In this method the interviewer personally meets the interviewee and asks necessary four prearranged questions to five top management member of each selected assembler regarding the subject of required information. Questions are carried by the researcher and forwarded to the interviewee according to that. Which are efficiently collected the data from the informants by cross examining them. Interview has been conducted as per the need of the study.

(c) Observation

Observation was carried out in five selected assembler office and factory two different days while questionnaire distribution and collection as well as at the interview session by arranging the volunteered respondents.

3.4 Data Analysis technique

The facts collected through primary data source (questionnaire, interview and observation) and secondary data source (books, internet and other references) were grouped, analyzed and reported using description , tabular representation, percentage of statistics, ratio and ranking methods in statement format, tables and figures representing formats, summarization, conclusion and recommendations. The findings and interpretations analyzed with SPSS version relating to the questionnaires, and reference materials & appendix parts are attached at the end of the research paper.

3.5 Ethical Consideration

The proposal would be submitted to Department of Industrial Management of Addis Ababa Science and Technology University to the college of Natural and Social Science. The study would conducted with gathering of related information from respondents using questionnaire and interview the name of respondents would not be identified by the researcher hence it is not subjected to apply for any harm as far as the confidentiality will remain and kept between

respondents and researcher. During collecting of data's through questionnaire and interview name of respondents would not be mentioned.

3.6 Population and Sample Characteristics

The total population for this study is 2863 all employees of the car assembly factories and metal industries development institution management members are considered as regard to this study. The researcher took Addis Ababa as a center to draw the sample size automobile assemblers and metal industries development institution management members for this study.

Thus the sample size would be 90 management members of factories existing in Addis Ababa those respondents were used to represent the whole population. A purposive sampling procedure would be employed exclusively select the managers from each industries because, these management staff are **expected to know** every challenge and opportunities in their industry and helps to reply the target questions of the topic.

3.7 Reliability and Validity

3.7.1 Reliability and Validity Instruments

To maximize the reliability of data collected the percentage of sampling **would be** increased, and increase the collectability of data's more than 80% of respondents from questionnaire and interview, the result **would** become reliable and valid to infer for population, and research area's Addis Ababa will easily inferred to Ethiopia.

The validity of the questions **would be** checked using SPSS software and spreadsheet). The pre-tested questionnaires **would be** distributed for a sample of 10 randomly selected from respondents and interview **would be** taken from random sample of 5 management members from each five different industries. The pilot test of this study **would be** evaluate based on the response with the advisor will

be corrected and would adjust the mistakes. The final printing of the study would be distributed to the department of industrial management of Addis Ababa Science and Technology University.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Data analysis and discussion

This chapter would cover the data analyses, which include descriptive analysis. The analyses interpreted and answer the research questions. Descriptive analysis described the respondent's demographic profile and also explained the procedure followed in the analysis of the data, present the main categories and topic that emerged from the data, and offer a discursive analysis and interpretation of the findings.

4.2 Descriptive Analysis

The questionnaire was distributed to the car assemblers' management members metal and engineering development institution those who exist in Addis Ababa represent the industry members. Out of 90 questionnaires 83(92%) useable questionnaires were collected the remaining 7 respondents have not reply. There was no missing data.

Table 4.1 Respondents' Demographic Data

Table 4.1.1 Gender

Gender	Frequency	Percent
Male	65	78.3
Female	18	21.7
Total	83	100.0

In the above table 4.1.1 regarding gender, out of 83 total respondents as shown in the above table 65 (78.3%) male respondents and 18 (21.7%) female respondents. The percentage shows that the numbers of male respondents are much higher than the female respondents.

Table 4.1.2 Age group

Age group	Frequency	Percent
21-30	24	28.9
31-40	38	45.8
41-50	17	20.5
51 & above	4	4.8
Total	83	100.0

In the above table 4.1.2 Age group shown on the subject of age from the total 83 respondents the majority of the respondents age group are from the 31-40 years with 38 (45.8%), followed by the age group of 21-30 years, with respondents 24(28.9%),from 41-50 years age group respondents are 17(20.5%) of the study. The minority of the respondents are from the age groups, 51years and above with 4(4.8%) respectively. **Number of age group from 31-40 are a middle age group exists between younger and elder age group .so this group are having well attentiveness to the research.**

Table4.1.3 Educational level

Educational Level	Frequency	Percent
Diploma	10	12.0
Degree	53	63.9
Master	20	24.1
Total	83	100.0

The majorities of the respondents in the above table 4.1.3 are Bachelor Degree holders, with 53 (63.9%) respondents then, followed by Master Degree respondents, with 20(24.1%) and diploma holders are ranked third with 10(12%) respondents The majority of the respondents have a capacity to reply the questions, masters (2nd degree) holders education level had a very well understood the questionnaire to respond, the other diploma holders respondents also had high contribution to respond.

Table 4.1.4 occupational level

Occupational Level	Frequency	Percent
General Manager	3	3.6
Deputy G/Manager	3	3.6
Director	5	6.0
Department Head	40	48.2
Division Head	21	25.3
Supervisor	11	13.3
Total	83	100.0

In the table 4.1.4 majority of the respondents are department head level with 40(48.2%), followed by division head level with 21 (25.3%), the supervisor level with 11(13.3%), respondents in General manager level 3(3.6%) and deputy general manager level with 3(3)% respondents were participated on the responding the questionnaire process . all of them are purposely selected to obtain the industry status. majority of the respondents have a first degree education level and the age group is from 31-40 years old, and most of them are department and division head level in their company.

Table 4.1.5 For how long you stay on this status

For how long you stay on this status	Frequency	Percent

Less than 1 Year	11	13.3
From 1 to 3 Years	17	20.5
From 4 to 6 Years	22	26.5
6 Years and Above	33	39.8
Total	83	100.0

As the table 4.1.5 shown the data related with respondents work experience or duration of time on the current position in their industry. As we have seen on the above table, 33(39.8%) respondents were 6 years and above, 22(26.5%) respondents were From 4 to 6 Years, 17(20.5%) respondents were From 1 to 3 Years, 11(13.3 %) respondents were less than 1 Year had their work experience accordingly as their high to low rank. **most of the sample respondents are stayed for six years and above in the industry, thus this long stay developed the respondents know how in the industry.**

Table 4.2 regarding the government finance laws, policies and procedures

No	Question	Description	strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	There are preconditions that constrained (hinder) obtaining bank loan for automotive industry.	Frequency	25.0	48.0	0	10.0	0
		Percent	0.0	57.8	0	12.0	30.1
2	There are problems to obtain foreign currency from the national bank	Frequency	50	33	0	0	0
		Percent	60.2	39.8	0	0	0
3	Suppliers' credit is acceptable in the country to the local car assemblers	Frequency	0	8	4	39	32
		Percent	0	9.6	4.8	47	38.6

As the data shows in the above table 4.2 regarding preconditions that constrained obtaining bank loan for automotive industry from the total 83 respondents 48 (57.8%) agreed, and the rest 25(30.1%) strongly agreed and 10 (12 %) disagreed. therefore reasons from the majority respondents those are fall on agree and strongly agree says existence of a number of preconditions which are not relevant to car assembly industry in relation with obtaining bank loan are significant challenge for the industry.

As the above table 4.2 question regarding problems to obtain foreign currency from the national bank, out of 83 respondents 50(60.2%) strongly agreed and 33(39.8%) agreed. Thus the majority of the respondents have the same opinion such as-

- the foreign currency provision for the car assembly industry sector is stated in regulation level; but not in practice so that as the investors engaged in the manufacturing industry are waiting for their turn as equally as the commodity importers and other importers; it is causing significant problem against factories to stop work due to shortage of raw material,
- There is no any difference in providing incentive or provision of foreign currency between the practices of commodity importers, who are importing products which are similar to those manufactured by the local car assembly industries, and the local manufacturers, who import semi knocked down products and supply for the market after assembling same,
- When there is foreign currency to be provided to the investors; it is impossible to obtain the new required foreign currency unless the settlement document is presented to the National Bank for the raw materials bought earlier.

- When bank permit is obtained from the National Bank, banks provide foreign currency to other beneficiaries if the permit is not used within 72 hours.

As we have seen from the above table 4.2 responses on the issue Suppliers' credit is acceptable in the country to the local car assemblers, from the total 83 respondents 39(47%) disagreed, 32(38.6) strongly disagreed, 8(9.6%) agreed and the remaining 4(4.8%) respondents were neutral. Therefore the reasons why the majority of respondents disagreed and strongly disagreed were

- National Bank of Ethiopia prevents the provision of supplier's credit with the intention of protecting the local market not to be filled with foreign products and agreed that the policy of the National Bank of Ethiopia is convincing.
- However, had the National Bank had provided suppliers' credit to support the local car assembly industry with strict monitoring and follow up, the industry would have been benefited from the local market. Other respondents 8(9.6%) agreed, and the remaining 4(4.8%) respondents were neutral with no reason.

Table 4.3 Questions regarding the customs duty and customs laws, policies and procedures of government

No	Question	Description	strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	There is difference in taxation between those who import finished product for direct sale and inputs imported by new car assemblers.	Frequency	32	49	2	0	0
		Percent	38.6	59	2.4	0	0
2	Collection of withholding tax and	Frequency	12	57	10	10	0

sure tax by customs authority at the time of import of raw materials and spare parts affect the car assembling industry.	Percent	14.5	68.7	4.8	12	0
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The data depicted on the above table 4.3 questions related with taxation difference between those who import finished product for direct sale and inputs imported by new car assemblers, out of the total 83 respondents 49(59%) agreed, 32(38.6%) strongly agreed the rest 2(2.4%) were neutral. therefore levy of excise tax on assemblers is the main difference between importers and assemblers with the following serious reasons -

- As the excise tax rate being effected on the finished product imported from abroad and parts of automobiles is one and same, it does not encourage the car assemblers because the rate is similar even the substitute goods manufactured locally.
- It is clear that any importer of finished product such as vehicle for direct sales in the local market should pay excise tax with the rate of 30%, 60% and 100% based on the cylindrical capacity, CC, of the product. In relation with this the excise tax being affected on raw materials and parts imported for manufacturing and assembly is one and same
- . In addition to that as the practice is concerned the manufacturer pays excise tax again on the value it has added in the process of manufacturing as this procedure is concerned primarily excise tax is paid on the goods as it was imported into the country and the 2nd when the goods is finished it pays again excise tax as equally rate as the imported finished goods again there is excise tax to be effected on the value addition that is brought with them manufacturing process. Therefore, the manufacturer pays tax above the importer who supplies the finished imported goods directly into the local market.

From the above table data the questions on the topic of Collection of withholding tax and sure tax by customs authority at the time of import of raw materials and spare parts affect the car assembling industry out of 83 respondents 57(68.7%) agreed, 12(14.5%) strongly agreed, 10(12%) disagreed and the rest of 4(4.8%) respondents were neutral.

Therefore as the majority respondents' both agree and strongly agree opinion; collection of withholding and sure tax becoming significant challenge for the local car assembly industry due to the following main reasons

- Government is collecting 3% withholding tax on the customs points against the goods that are imported disassembled as raw material for manufacturers and
- Customers withheld 2% as withholding tax upon the sales of the locally manufactured product.
- This withholding tax is improperly collected from the manufacturers who have tax relief privileged as they are engaged in the car assembly industry sector.

Other minority respondents those are gave their responses agree, are have with their reasons sure tax is not levied on domestic car assemblers.

Whereas withholding tax will be refund to the importers and assemblers at the end of the budget year while clearing their tax and duty.

Table 4.4 Regarding the Government Supply and Logistics Laws, Policies and Procedure

No	Question	Description	strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The period given for demurrage in port is enough from Ethiopian shipping line	Frequency	0	9	0	22	52
		Percent	0	10.8	0	26.5	62.7

2	There is enough time to return rented containers for input material.	Frequency	3	10	3	46	21
		Percent	3.6	12	3.6	55.4	25.3
3	There is special service desk is arranged in the Ethiopian Shipping Line Offices for car assembly sector as a manufacturing industry.	Frequency	0	0	0	56	27
		Percent	0	0	0	67.5	32.5
4	Car assembly factories have been subjected to levying higher amount of penalty while importing inputs.	Frequency	15	54	0	0	14
		Percent	18.1	65.1	0	0	16.9
5	There is room for negotiation with the shipping line to determining the freight cost	Frequency	0	0	0	58	25
		Percent	0	0	0	69.9	30.1
6	There are some occurrences for raw materials loading and unloading in ports without consensus from the importer	Frequency	11	62	0	0	10
		Percent	13.3	74.7	0	0	12

As we have seen from the above table 4.4, question regarding the time given for demurrage in port is enough from Ethiopian shipping line get the following responses, out of 83 total respondents 52(62.7%) **strongly disagreed**, 22(26.5%) **disagreed** and the remains 9(10.8%) agreed. according to the collected data majority respondents' state following their reasons

- The shortness of the demurrage period in dry port is causing significantly higher amount of cost against the assemblers.
- The vessels of the Ethiopian Shipping Lines can't pass through the ports found throughout the world.

- Some car assemblers are importing machineries, raw materials, equipment and other inputs from the places where there are some European ports are found crossed by the vessels of the Ethiopian Shipping Lines and its agents.
- As a result of this, the companies are forced to pay higher amount of port payments due to the goods they are importing and they are exposed for higher amount of loss by wasting their expensive time that can be used for manufacturing activities.
- Besides the fact that the existing period specified for demurrage is too short; the period can be expired even before the time the goods being imported by the assembly industries do not reach to the final destination port.
- Based on this the demurrage should be effected by the investors even before the time the machineries, equipment and raw materials that are imported for the use of manufacturing industries and factories as raw material and input for their product, before the time the necessary customs formalities are accomplished and released from the customs point.

The remains insignificant 9(10.8%) respondents have no reason why they disagree or the given demurrage time is enough.

From the data show on the above table 4.4, **question regarding There is enough time to return rented containers for input material**, out of 83 whole respondents, 46(55.4%) disagreed 21(25.3%) strongly disagreed, 10(12%) said agree, 3(3.6%) strongly agreed, others of respondents 3(3.6%) were neutral respectively. This means that the majority of respondents said disagreed due to the following points-

- Since the car assemblers are importing containers that contain a number of various semi knockdown parts; the companies cannot release the goods from customs within the time specified for demurrage due to these specified time.
- As a result of this the deposit that they have made to secure the containers cannot be released for them.
- In addition to that they are required to settle additional payment to return the containers to the Ethiopian Shipping lines unload the goods in the premises of the factory and make the containers released from the customs.

In the above 4.4, Question connecting with special service desk for car assembly sector as a manufacturing industry that arranged by the Ethiopian Shipping Line Offices; from the total number of respondents 56(67.5%) disagreed and 27(32.5%) strongly disagreed. Thus almost all respondents not agreed on the subject matter with this reason-

- investor who invest significant amount of money in car assembly industry there is no separate window to obtain the service; rather they are forced to serve as equally as other organs which are not prioritized and have no support and incentive from the government

From the above table 4.4, out of 83 total respondents 54(65.1%) are said agree, 15(18.1%) strongly agreed and the remains 14(16.9%) disagreed on the topic titled Car assembly factories have been subjected to levying higher amount of penalty while importing inputs.

As a result of the majority respondents' response and the following confirmed reason levying high amount of penalty is concerned as one of major problem for the industry. Such as

- The practice of levying higher amount of penalty for any discrepancy that happen in the specification of the goods between the document and physical goods during the customs inspection is

From the data shows in the above table 4.4 **question regarding there are some occurrences for raw materials loading and unloading in ports without consensus from the importer**

from total number of respondents 62(74.7%) agreed, 11(13.3%) strongly agreed and others 10(12%) disagreed. Thus the greater part of the respondents are having the same opinion on the question with the following reasons-

- The action of Maritime Transport and Logistics Service Enterprise starting transporting goods Djibouti to dry port without consulting the importer
- Goods being unloaded in unwanted dry port and the transport fee being overstated.

Table 4.5 Regarding the Government procurement Procedures

No	Question	Description	strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Government vehicle procurement system is encouraging for local car assemblers.	Frequency	0	39	0	29	15
		Percent	0	47	0	34.9	18.1

As the data depicted in the above 4.5, table, from the total 83 respondents 39(47%) agreed, 29(34.9%) disagreed and 15(18.1%) strongly disagreed. As the majority respondent view currently there is some starting action of procurement from local car assemblers ,however full purchasing implementation is yet not performed at all regional states; on the other hand

respondents those said strongly disagree and disagree categories gave the following points as challenges -

- Even though there is government procurement system in the central level for the purchase of federal and regional governments; as there is no clear and uniform rule of bid purchase implementation that prioritizes the local products;
- There are practices of making the local manufacturers out of the competition in every office and inability to resolve the problem.
- In most cases the government office purchases are discriminating the local manufacturer.

Table 4.6 questions related with Problem of the Supply of Infrastructure

No	Question	Description	strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Electric power supply and related services are well for the sector.	Frequency	0	15	10	53	5
		Percent	0	18.1	12	63.9	6
2	The process of acquiring land for investment easy and manageable within short period of time and required space.	Frequency	0	2	6	50	25
		Percent	0	2.4	7.2	60.2	30.1

In the table 4.6 questions related with Problem of the Supply of Infrastructure Out of the total number of 83 respondents 53(63.9%) disagreed, 15(18.1%) agreed, 10(12%) were neutral and the lasting 5(6%) strongly disagreed. From the given data and the following reasons we can conclude that there is a challenge on electric power supply and related services are not well for the sector

- The failure to provide sufficient electric power
- Interruption of electric power

- There is serious problem in business communication
- Even if payments were collected from each factory before two years to installed power factor corrector in order to minimize the wastage of electric power that is being observed significantly; it is not yet implemented. As a result of this the manufacturers are being caused to penalty due to the wastage of power

From the above table 4.6, data question about, process of acquiring land for investment easy and manageable within short period of time and required space. Out of 83 respondents 50(60.2%) are said disagree, 25(30.1 %) strongly disagreed, 6(7.2%) neutral and very insignificant respondents 2(2.4%) agreed. As the majority respondents acquiring of land for investment is very difficult for the local car assemblers with the following reasons –

- Absence of uniform and timely framed procedure and the letdown of the decision making organ to make decision as soon as possible
- The failure to on time respond for the request of the investor while they have accomplished the necessary formality to obtain land for investment.

Table 4.7 Questions related with the market and production

No	Question	Description	strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Country of origin of domestic car assembler's raw material does not have any challenges to sell the assembled vehicles in local market.	Frequency	0	22	2	40	19
		Percent	0	26.5	2.4	48.2	22.9
2	Each car assembly factory	Frequency	0	0	0	26	57

	production capacity utilized at their full capacity	Percent	0	0	0	31.3	68.7
3	We can say that all locally assembled, new and used imported cars meet the country automobile demand	Frequency	0	0	0	55	28
		Percent	0	0	0	66.3	33.7
4	Ethiopian automotive industry have created opportunities for the country	Frequency	14	67	2	0	0
		Percent	16.9	80.7	2.4	0	0

From the above data table 4.7, out of 83 total respondents 40(48.2%) disagreed, 22(26.5%) agreed, 19| (22.9%) strongly disagreed and rest of 2(2.4%) were neutral. Therefore as the greatest part of respondent view and reason origin of raw material is one of main challenge for the assemblers such as -

- Most of local car assemblers imported raw materials' country of origin are republic of china
- Customers' attitude towards made in China products is negative and consider as inferior product quality comparing with others

The above table 4.7, represents the finding of each car assembly factory production capacity utilized at their full capacity, It was indicated from the survey that 57(68.7%) strongly agreed and 26(31.3%) disagreed. from the majority respondent point of view each car assembler could not utilized at their full capacity with the following reasons such as –

- Due to lack of foreign currency
- Market challenges for locally assembled cars against imported new Japanese brands by companies existing for long year's in the country.

- Ethiopia's automotive market is dominated by second-hand imported vehicles.

In table 7.7, the issue of demand for the country automobile met with locally assembled, new and used imported cars, 55(66.6%) strongly disagreed and 28(33.7%) agreed. thus we can conclude that the data from the total respondents opinion that could not met the country automobile demand ,because

- Now days the country economic growth goes up year to year
- the people per capital income at increasing level
- the country road infrastructure development is extended

From the above data table 7.7, response to the question on the topic of Ethiopian automotive industry have created opportunities for the country, from the total 83 respondents 67(80.7%) agreed, 14(16.9%) strongly agreed and 2(2.4%) were neutral. Reasons mentioned from majorities were

- Adopted new technologies from abroad,
- Job opportunities for the citizens
- Import substitute products for the country

4.3 Interview questions

1. Which tax type and rate discourage the local car assemblers?

- As the excise tax rate being effected on the finished product imported from abroad and parts of **input for car assembly** is one and same, it does not encourage the manufacturer because the rate is similar even the substitute goods manufactured locally.
- It is clear that any importer of finished product such as vehicle for direct sales in the local market should pay excise tax with the rate of 30%, 60% and 100% based on the loading capacity, CC, of the product.
- In relation with this the excise tax being affected on raw materials and parts imported for manufacturing and assembly is one and same with vehicles imported for sale. So that it does not encourage the manufacturers.
- In addition to that a manufacturer pays excise tax again pay on the value it has added in the process of manufacturing therefore, car assemblers pays tax above the importer who supplies the finished imported goods directly into the local market. Therefore, it is clear that the procedure supports not the manufacturer; rather it supports and encourages the importer.
- On the other hand the amount of the tax that is primarily paid upon importation is considered as cost of manufacturing for the next tax payment of government. This causes the payment of tax repeatedly in the way it contradicts the proclamation.

Therefore, this procedure can be said that it is making the car assemblers not to be competent in the market in price.

2. What type of taxation practices applied to missed, broken or wear/tear factory items which are imported as raw material and input for the assembly?

- The excise tax, customs duty and penalty to be effected on some missed factory items that is imported as raw material and input for manufacturing is higher even against the items which are being sent from abroad for free.
- It is known that the parts and raw materials of a given car are above 2000 CC and 3000 CC types of goods and in some cases it is impossible to quantify same. However, the tax is assessed up on each and every type of the raw material and in general as to the model and type of the vehicle.
- However, if such minor parts of the car are observed as missed items the customs duty is paid as the car is finished and all the components and parts are fulfilled. However, those the full customs duty of the car is already paid to the customs authority, when the missed or defective items are brought from abroad to replace the defective and missed parts from the manufacturer as per the contract agreement signed between them, the customs duty should be paid again on the replacement goods which are imported for free as replacement item. Such items are considered as spare part not as raw material shows that higher amount of customs duty should be paid to customs authority. The issue that should be considered hear is not the customs duty payment that is effected for the 2nd time, but also as such replacement items are not imported with independent LC opened through bank so that the customs quality needs to collect penalty with the

rate of three times the price of the goods. This procedure encourages not the industry, rather the importer.

3. Which infrastructures provision other than electric power supply influence the performance your industry?

- Poor quality of access road to factories
- While roads should be maintained from time to time, this is not being done as necessary
- Since the manufacturers are paying customs duty and tax for the income they make; the roads should be constructed with the required quality or the existing ones should be maintained.

4. What are the main challenges for local car assemblers to sell their vehicles in the local market?

- Availability of foreign currency
- imported new as well as used cars
- taxation
- public attitude toward country of origin for china cars
- unimplemented government policies procedures

CHAPTER FIVE

FINDING, CONCLUSIONS AND RECOMMENDATIONS

5.1 Major findings

The findings of the study are furnished in the following sequence and are given chronologically based on the order of objectives of the study.

5.1.1 Regarding the government finance laws, policies and procedures

- A number of preconditions which are not relevant to car assembly industry in relation with obtaining bank loan are significant challenge for the industry.
- The foreign currency provision for the car assembly industry sector is stated in regulation level; but not in practice so that as the investors engaged in the manufacturing industry are waiting for their turn as equally as the commodity importers and other importers.
- It is obvious that the lack of foreign currency in the country central bank for all private as well as government organization those who having interest to use foreign currency for their business, therefore what i have suggest one important point to resolve such a problem of dollar, there must have an agreement between Ethiopian government and Chinese government to replace of American dollar in to Chinese RMB for the same foreign currency purpose usage.
- There is no any difference in providing incentive or provision of foreign currency between the practices of commodity importers with similar to those manufactured import semi knocked down products and supply for the market after assembling same,

- When there is foreign currency to be provided to the investors; it is impossible to obtain the new required foreign currency unless the settlement document is presented to the National Bank for the raw materials bought earlier.
- When bank permit is obtained from the National Bank, banks provide foreign currency to other beneficiaries if the permit is not used within 72 hours.
- National Bank of Ethiopia prevents the provision of supplier's credit with the intention of protecting the local market not to be filled with foreign products and agreed that the policy of the National Bank of Ethiopia is convincing. However, had the National Bank had provided suppliers' credit to support the local car assembly industry with strict monitoring and follow up, the industry would have been benefited from the local market?

5.1.2 Regarding, customs duty and customs laws, policies and procedures of government.

- As the excise tax rate being effected on the finished product imported from abroad and parts of automobiles is one and same, it does not encourage the car assemblers because the rate is similar even the substitute goods manufactured locally.
- It is clear that any importer of finished product such as vehicle for direct sales in the local market should pay excise tax with the rate of 30%, 60% and 100% based on the cylindrical capacity, CC, of the product. In relation with this the excise tax being affected on raw materials and parts imported for manufacturing and assembly is one and same. In addition to that as the practice is concerned the manufacturer pays excise tax again on the value it has added in the process of manufacturing as this procedure is concerned primarily excise tax is paid on the goods as it was imported into the country and the 2nd when the goods is finished it pays again excise tax as equally rate as the imported finished goods again there is excise tax to be effected on the value addition that is

brought with them manufacturing process. Therefore, the manufacturer pays tax above the importer who supplies the finished imported goods directly into the local market.

- Government is collecting **3% withholding** tax on the customs points against the goods that are imported disassembled as raw material for manufacturers and Customers **withheld 2% as withholding tax** upon the sales of the locally manufactured product.
- Withholding tax is improperly collected from the manufacturers who have tax relief privileged as they are engaged in the car assembly industry sector.

5.1.3 Regarding the Government Supply and Logistics Laws, Policies and Procedure

- The action of Maritime Transport and Logistics Service Enterprise starting transporting goods Djibouti to dry port without consulting the importer .
- Goods being unloaded in unwanted dry port and the transport fee being overstated.
- Since the car assemblers are importing containers that contain a number of various semi knockdown parts; the companies cannot release the goods from customs within the time specified.
- In addition to that they are required to settle additional payment to return the containers to the Ethiopian Shipping lines unload the goods in the premises of the factory and make the containers released from the customs.
- Investor who invest significant amount of money in car assembly industry there is no separate window to obtain the service; rather they are forced to serve as equally as other organs which are not prioritized and have no support and incentive from the government
- The practice of levying higher amount of penalty for any discrepancy that happen in the specification of the goods between the document and physical goods during the customs inspection.

- The shipping line is determining the freight cost solely the business is monopolized; it is causing burden against the manufacturer.
- The shortness of the demurrage period in dry port is causing significantly higher amount of cost against the assemblers.
- The vessels of the Ethiopian Shipping Lines can't pass through the ports found throughout the world.
 - Some car assemblers are importing machineries, raw materials, equipment and other inputs from the places where there are some European ports are found crossed by the vessels of the Ethiopian Shipping Lines and its agents.
 - As a result of this, the companies are forced to pay higher amount of port payments due to the goods they are importing and they are exposed for higher amount of loss by wasting their expensive time that can be used for manufacturing activities.
- Besides the fact that the existing period specified for demurrage is too short; the period can be expired even before the time the goods being imported by the assembly industries do not reach to the final destination port.
- Based on this the demurrage should be effected by the investors even before the time the machineries, equipment and raw materials that are imported for the use of car assembly industries and factories as raw material and input for their product, before the time the necessary customs formalities are accomplished and released from the customs point.

5.1.4 Regarding the Government procurement Procedure

- Even though there is government procurement system in the central level for the purchase of federal and regional governments; as there is no clear and uniform rule of bid purchase implementation that prioritizes the local products;
 - There are practices of making the local manufacturers out of the competition in every office and inability to resolve the problem.
- In most cases the government office purchases are discriminating the local manufacturer.

5.1.5 Related with Problem of the Supply of Infrastructure

- The failure to provide sufficient electric power and the power interruption that is observed from time to time that lead the assemblers to under capacity production and wastage of raw material on production process and idle time.
- Absence of uniform and timely framed procedure and the let down of the decision making organ to make decision as soon as possible
- The failure to on time respond for the request of the investor while they have accomplished the necessary formality to obtain land for investment.

5.1.6 Related with the market and production

- Customers' attitude towards made in China products is negative and consider as inferior product quality comparing with others
- Due to lack of foreign currency
- Market challenges for locally assembled cars against imported new Japanese brands by companies existing for long years in the country.
- Ethiopia's automotive market is dominated by second-hand imported vehicles

- Currently, assembled vehicles are highly available in the country, with an equivalent price of used imports, which could be a strong competitive advantage. These companies are also benefiting from the country's cheap work force, and create employment opportunities for several local employees.
- Now days the country economic growth goes up year to year
- the people per capital income at increasing level
- The country road infrastructure development is extended but yet not having full coverage.
- Adopted new technologies from abroad,
- Job opportunities for the citizens
- Import substitute products for the country

5.2 Conclusions

Under this study the following main points were found as the most challenging area for Ethiopian car assembly industry on the subject of the government finance, customs duty and customs tax, Supply and Logistics service, procurement procedure and Problem of the Supply of Infrastructure policies and procedures are primarily examined and concluded from the research findings. So that if all these identified challenges could not get special consideration and solution as well as the given opportunities are properly unutilized the industry members will go to withdraw from their operation gradually in the near future. It is examined and drawn findings from the stated research questions, the research findings are finally get valuable recommendation to reply the research objectives of this study.

5.3 Opportunities

- Assembled vehicles are highly available in the country, with reasonable price.

- These companies are also benefiting from the country's cheap work force, and
- Created employment opportunities for several local employees.
- Adopted new technologies from abroad
- The technology transfer from **SKD** to **DKD** then to **CKD** and finally to replace the product ,
- Job opportunities for the citizens
- Import substitute products for the country

5.4 Recommendations

Based on the study's findings, the following actions are recommended by the researcher

5.4.1 Regarding the government finance laws, policies and procedures

- It is better if the regulation that is requiring the purchase of 27% Treasury bill to be exempted particularly for the loans to be provided for the company's/industries engaged in the car assembly industries, because the finance and banks are obliged to buy 27% Treasury bill for each loan as the main precondition.
- As alternative it will be good if the national bank of Ethiopia obligates both the government and private banks to buy Treasury bill if they fail to provide long term loan for car assembly industry sector. This action is to be under taken by national bank of Ethiopia.
- The banks should follow the policy that encourages the local manufacturing industry. If this cannot be done, they should establish a system by which they can entertain all parties equally. This action is to be under taken by national bank of Ethiopia.
- It would be good if the procedure that gives priority for the loan application of the car assembly industries with short and fast service and consider the loan request of the local car assemblers. This action is to be under taken by national bank of Ethiopia.

- It would be also more better , if a policy that provide service for the car assembly industries with less amount of commission of service and interest rate of loan to encourage the car assembly industries and business facilities by the National Banks. This action is to be under taken by all commercial bank.
- Banks should have better foreign currency provision service than the importer as the sector imports raw materials, equipment, machineries, and trainers. This action is to be under taken by national bank of Ethiopia.
- It is possible to provide for support for the sector by giving loan for L/C to be opened for the raw materials to be imported and sometimes when the payment cannot be paid. This action is to be under taken by national bank of Ethiopia.
- Since the manufacturing sector is not the trade of commodities; it is necessary to establish a system that enable the manufacturers to obtain suppliers credit to help them to purchase raw materials, machinery and equipment with the due monitoring and follow up. This action is to be under taken by national bank of Ethiopia.
- It would be great if suppliers' credit is permitted for car assembly industries who are trying their best to replace import. This action is to be under taken by national bank of Ethiopia.
- The above all recommendations are to be under taken by national bank of Ethiopia.

5.4.2 Regarding the customs duty and customs laws, policies and procedures of government.

- It is recommended that different HS Code and tariff should be established for the parts of vehicles that are going to be used for assembly and those used for direct sales and the rate for the customs duty should be entertained in the second schedule.

- The Semi Knock Down (SKD) raw materials imported to be used for input of factory product should be entertained based on their invoice price and the excise tax should be entertained in different tariff for the merchant and the manufacturer.
- Regarding the payment of tax on tax, dispute that arises in the implementation of same based on this it is necessary to issue directive or regulation that is supported by proclamation to prevent levying up on tax.
- It is further necessary to make the excise tax rate of raw materials and parts of vehicles that is imported for assembly and manufacturing to be less than the rate of excise tax being levied against finished products.
- The absence of HS code and tariff schedule that is separated for customs tariff harmonized code for goods of direct sales and inputs of manufacturing; it is necessary to entertain raw materials and other inputs being imported as input for manufacturing should be entertained with lower rate of customs duty than those imported for direct sales in the local market.
- It is necessary to prepare and issue 2nd tariff schedule for such replacement items to be supplied by the manufacturer as per the warranty for the damaged, missed or defective items considering them as raw material, but not as spare part. It is further necessary to clearly state the tax rate that should be applicable on the goods that are imported as input of factory in the tariff book.
- The investors who have the privilege of customs duty free are not willing to buy products with customs duty payment and request for the return of the paid customs duty based on their privilege.

- It is necessary to issue directive that makes the car assembly industry owners who have the privilege of tax holiday not to pay 3% withholding tax before the time they start manufacturing for the raw material they order for production.
- Even if the costs and expenses of study and research is permitted to be considered as costs before tax; it would be great if there is the procedure that enable to have the return of half of the cost as incentive when it is confirmed that the research and study is problem solving.
- Sure tax should not be paid in the car assembly industry it would be great if the tax levied upon the spare parts and raw materials being imported .
- It would be better if special window is made accessible for the manufacturing industry sector
- It would be fine if a work division and general work process is established to provide service for only the manufacturing industries.
- It would be good if the Franco-Valuta procedure permits the manufacturing industry to import spare parts and chemicals for not more than USD 5,000.00
- Whenever any rules and regulations are going to be issued newly, it is necessary at least to have good discussion with stakeholders or if it is not possible to do so; providing the necessary explanations even after it's is enacted.
- The above all recommendations are to be under taken by Ethiopian customs and revenue authority.

5.4.3 Regarding the Government Supply and Logistics Laws, Policies and Procedure

- In order to enable importing the raw materials upon using other vessels; it would be good if the necessary permission is given by the Ethiopian Shipping Lines and the permission

of the Ethiopian Revenues and Customs Authority to accomplish the necessary customs formalities.

- It is necessary to make **extended period of demurrage** for raw materials that are being imported by the car assembly industries and factories as input of their product
- It is necessary to establish a system that enable to accept guarantees of insurance in the form of deposit in addition to or out of the deposit to be made to secure the container for the imported goods of the manufacturing sector.
- The Ethiopia Shipping Lines Should open special window service to provide service for the manufacturing serviced and provide special and fast service with independent work division is opened to provide service for the manufacturing industry sector.
- Since the legal provision stipulated in Article 28 No. 4 of the Customs Proclamation No. 622/2009 that requires the accomplishment of customs formalities to be accomplished **within one year for any imported** manufacturing input imported and stored in bonded warehouses and released from the warehouse should be amended by making the period extended for one year for the **basic metals and** engineering sector considering the nature of raw materials imported for manufacturing purpose.
- It is necessary to prepare and issue directive that enable to give priority and special attention for car assemblers' raw materials and provide fast service in the customs inspection system.
- It would be good if the price of the shipping line is assessed against the international price as per the existing law.
- The Maritime Transport Logistics service enterprise should be made to work competing with others the service fee it requires should be reasonable for sea and dry freight service.

- As the goods brings difference in their weight when they are mixed and loaded and results with additional customs duty and penalty; it is necessary to make them to correct their practice.
- After the goods of importers arrive at port; **the period of 15 days** is not enough for importers to sign contract agreement with transistors and transporters and pay the required customs duty and tax. Thus it is necessary to extend the grace period to 45 days.
- The Maritime, Transport and Logistics Service Enterprise should improve its work and documentation system and it should unload the goods it imports in multimodal at the designated dry port.
- The above all recommendations are to be under taken by Ethiopian shipping line enterprise.

5.4.4 Regarding the government **procurement procedure**

- It is necessary to include in the regulation that government procurement agencies should follow open bid, and if they follow limited bid, it is obligatory to make the local manufacturers.
- For the purchase of vehicles, the road transport authority should participate in presenting the upgraded technical specification and the bidder that meets the said technical specification shall be qualified and the winner shall be the one who offered the lowest price without needing to sum up the result obtained in the technical evaluation with the financial. As long as the local manufacturers maintain the due quality standard of their products and their price is better; before the purchase is conducted from abroad, it would be better if the metals industry institute checks and confirms that the local manufacturers can't supply the required products.

- It is necessary to prepare and issue directive that requires the Road Transport Authority to update the technical competence specification of vehicles in line with the grown technology that our country has achieved and the recent technological advancement of the world every two years.
- It is necessary to issue regulation that is in line with the existing objective condition.
- It is necessary to make government office to have good attitude towards local products, the customs duty free privilege being given for imported items should also be given for local manufacturers and create the necessary conditions by which local products can be prioritized.
- The above all recommendations are to be under taken by Ministry of finance and economy development cooperation.

5.4.5 Related with Problem of the Supply of Infrastructure

- It is necessary to provide manufacturers with the amount of power that they have agreed with the corporation and the amount of money they paid
- If the shortage of power is a most. In order to continue with export, it is necessary to provide power for big industries. That is because we should taken to account the man power they hired and the amount of capital they invested
- It is necessary to facilitate the necessary condition to pay compensation for the parts of machineries that is damaged due to the interruption of power as opportunity cost
- It should be necessary to inform for newly coming industries that there is shortage of power
- Since the impact resulted from the electric power interruption is higher; it is necessary to correct the problem by giving special attention for the manufacturing industries

- It is necessary to make ethio-telecom to urgently correct such problems
- Since the manufacturers are paying customs duty and tax for their income , the roads should be constructed with the required quality or the existing ones should be maintained.
- The above all recommendations are to be under taken by federal government and regional states with other related organizations.

References

- Anthony Black & Thomas McLennan (2015) *The Last Frontier: Prospects and Policies for the Automotive Industry in Africa -PRISM*, School of Economics University of Cape Town, Africa's Automotive Industry: *Potential and Challenges*, Working Paper Series N° 282, African Development Bank, Abidjan, Côte d'Ivoire) (July 2015) *TIPS Annual Forum Johannesburg July 2015*
- AACCSA (Addis Ababa Chamber of Commerce and Sectorian Association). (2014). *An overview of Ethiopian manufacturing sector (2014)*.
- (AACCSA) Addis Ababa Chamber of Commerce and Sectoral Association (October 2015) *Addis Ababa, Ethiopia Produced By : DAB Development Research and Training PLC dabdr@gmail.com*
- Book Jaipur ,C.R. KOTHARI *Research methodology methods and techniques: second revised edition*
- Black, A. (2017), Makundi, B. and McLennan T.
- Dana Sanchez, (Jun 01, 2016) *Ethiopia Wants To Be Africa's No. 1 Auto Manufacturer email - <http://www.cavie.org/en/index.php/en/assurance-2/113->*
- Ethiopia Population, (2018-01-24). *Retrieved 2018-04-21, from <http://worldpopulationreview.com/countries/ethiopia-population/>*
- Fowler, F.G., (1976) *Ethiopia Wants To Be Africa's No. 1 Auto Manufacturer: Written on 09 June 2016*

<http://www.cavie.org/en/index.php/en/assurance-2/113-ethiopia-wants-to-be-africa-s-no-1-auto-manufacturer>

<https://www.reuters.com/article/ethiopia-autos/africa-business-ethiopia-to-expand-tiny-car-assembly-business-in-industrial-drive-idUSL5N18I090>

2M Editor, Published on (15 November 2017), Category: *Latest Business Alerts Walta*

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